Before the **Federal Communications Commission** Washington, D.C. 20554

In the Matter of)	
)	
Accelerating Wireline Broadband Deployment by)	WC Docket No. 17-84
Removing Barriers to Infrastructure Investment)	

SECOND FURTHER NOTICE OF PROPOSED RULEMAKING

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By the Commission: Chairwoman Rosenworcel and Commissioner Carr issuing separate statements.

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	BACKGROUND	4
III.	. DISCUSSION	7
	A. Determining the Applicability of Cost Causation and Cost Sharing	
	B. Allocating Costs When Utilities Directly Benefit from Pole Replacements	
	1. Responsibility for Pole Upgrades and Modifications Unrelated to New Attachments	19
	2. Costs and Benefits of Early Pole Retirement	27
	C. Avoiding and Resolving Disputes Between Utilities and Attachers	35
IV.	. PROCEDURAL MATTERS	38
V.	ORDERING CLAUSES	43
AP	PPENDIX A – Initial Regulatory Flexibility Analysis	

I. INTRODUCTION

Section 224(b) of the Communications Act of 1934, as amended (Act), grants the Commission the authority to regulate the rates, terms, and conditions of pole attachments. Since 2011, the Commission has undertaken a series of reforms of its pole attachment rules with the aim of making access to poles faster, easier, safer, more predictable, and more affordable to help speed the deployment of broadband infrastructure and enhance the ability of utilities and attachers to successfully negotiate pole attachment agreements.² In this Second Further Notice of Proposed Rulemaking (Second Further Notice),

¹ 47 U.S.C. § 224(b).

² See, e.g., Implementation of Section 224 of the Act; A National Broadband Plan for Our Future, WC Docket No. 07-245, GN Docket No. 09-51, Report and Order and Order on Reconsideration, 26 FCC Rcd 5240 (2011) (2011) Pole Attachment Order); Implementation of Section 224 of the Act; A National Broadband Plan for Our Future, WC Docket No. 07-245, GN Docket No. 09-51, Order on Reconsideration, 30 FCC Rcd 13731 (2015); Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84, Report and Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking, 32 FCC Rcd 11128 (2017) (2017) Wireline Infrastructure Order); Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84, WT Docket No. 17-79, Third Report and Order and Declaratory Ruling, 33 FCC Rcd 7705 (2018) (2018 Wireline Infrastructure Order); Accelerating Wireline Broadband

we seek comment on whether further reforms are necessary to provide regulatory certainty with regard to pole replacements, specifically with regard to the allocation of costs for pole replacements.

- 2. In January 2021, the Wireline Competition Bureau (Bureau) issued the *Pole Replacement Declaratory Ruling*, clarifying that it is unreasonable and inconsistent with section 224 of the Communications Act, the Commission's rules, and past Commission precedent, for utilities to impose the entire cost of a pole replacement on a requesting attacher when the attacher is not the sole cause of a pole replacement.³ The Bureau found that the clarification in the *Pole Replacement Declaratory Ruling* was necessary to address inconsistent utility practices with respect to the allocation of pole replacement costs.⁴
- 3. We issue this Second Further Notice to seek comment on the universe of situations where the requesting attacher should not be required to pay for the full cost of a pole replacement and the proper allocation of costs among utilities and attachers in those situations. We also seek comment on whether the Commission should require utilities to share information with potential attachers concerning the condition and replacement status of their poles and other measures that may help avoid or expedite the resolution of disputes between the parties.

II. BACKGROUND

4. Over the years, the Commission has addressed cost allocation and cost causation principles as they relate to pole replacements. In 1996, as part of its implementation of sections 224(h)⁵ and 224(i)⁶ of the Act, the Commission determined that when a modification, such as a pole replacement, is undertaken for the benefit of a particular party, under cost causation principles, the benefiting party is obligated to assume the cost of the modification.⁷ The Commission also found that when a utility decides to modify a pole for its own benefit, and no other attachers derive a benefit from the modification, the utility would bear the full cost of the new pole in that situation.⁸ The Commission also adopted a cost sharing principle for when an existing attacher uses a modification by another party as an opportunity to add to or modify its own attachments.⁹ It then extended this principle to utilities and other attachers

Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84, Declaratory Ruling, 35 FCC Rcd 7936 (WCB 2020) (2020 Declaratory Ruling).

³ Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84, Declaratory Ruling, 36 FCC Red 776, 777, at para. 3 (WCB 2021) (Pole Replacement Declaratory Ruling).

⁴ *Id.* at 777, 779-81, paras. 3, 6, 8.

⁵ Section 224(h) states that "[w]henever the owner of a pole, duct, conduit, or right-of-way intends to modify or alter such pole, duct, conduit, or right-of-way, the owner shall provide written notification of such action to any entity that has obtained an attachment to such conduit or right-of-way so that such entity may have a reasonable opportunity to add to or modify its existing attachment. Any entity that adds to or modifies its existing attachment after receiving such notification shall bear a proportionate share of the costs incurred by the owner in making such pole, duct, conduit, or right-of-way accessible." 47 U.S.C. § 224(h).

⁶ Section 224(i) states that "[a]n entity that obtains an attachment to a pole, conduit, or right-of-way shall not be required to bear any of the costs of rearranging or replacing its attachment, if such rearrangement or replacement is required as a result of an additional attachment or the modification of an existing attachment sought by any other entity (including the owner of such pole, duct, conduit, or right-of-way)." 47 U.S.C. § 224(i).

⁷ Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket Nos. 96-98, 95-185, Report and Order, 11 FCC Rcd 15499, 16077, 16096, paras. 1166, 1211 (1996) (Local Competition Order).

⁸ Id. at 16077, para. 1166.

⁹ *Id.* ("Other parties with attachments would not share in the cost [of a modification], unless they expanded their own use of the facilities at the same time.").

seeking to use modifications as an opportunity to bring their own facilities into compliance with safety or other requirements and reiterated that principle in the 2018 Wireline Infrastructure Order.¹⁰

- 5. On July 16, 2020, NCTA—the Internet & Television Association filed a Petition asking the Commission to clarify its rules in the context of pole replacements.¹¹ Specifically, NCTA asked the Commission to declare that: (1) pole owners must share in the cost of pole replacements in unserved areas pursuant to section 224 of the Communications Act, section 1.1408(b) of the Commission's rules, and Commission precedent; (2) pole attachment complaints arising in unserved areas should be prioritized through placement on the Accelerated Docket under section 1.736 of the Commission's rules; and (3) section 1.1407(b) of the Commission's rules authorizes the Commission to order a pole owner to complete a pole replacement within a specified time frame or designate an authorized contractor to do so.¹² NCTA argues that without Commission action, the costs and operational challenges associated with pole replacements will inhibit attachers from deploying broadband services to Americans in unserved areas.¹³
- 6. The Bureau declined to act on NCTA's Petition, finding that "it is more appropriate to address questions concerning the allocation of pole replacement costs within the context of a rulemaking, which provides the Commission with greater flexibility to tailor regulatory solutions." It found, however, that the record developed in response to the NCTA Petition revealed inconsistent practices by utilities with regard to cost responsibility for pole replacements. Accordingly, the *Pole Replacement Declaratory Ruling* clarified that, pursuant to section 1.1408(b) of the Commission's rules and prior precedent, "utilities may not require requesting attachers to pay the entire cost of pole replacements that are not solely caused by the new attacher and, thus, may not avoid responsibility for pole replacement costs by postponing replacements until new attachment requests are submitted." 16

III. DISCUSSION

7. In this Second Further Notice, we seek comment on ways to eliminate or expedite the resolution of pole replacement disputes by establishing clear standards for when and how utilities and attachers must share in the costs of a pole replacement that is precipitated by a new attachment request. In the *Pole Replacement Declaratory Ruling*, the Bureau found that it would be contrary to the Commission's rules and policies to require a new attacher to pay the entire cost of a pole replacement when a pole already requires replacement (e.g., because the pole is out of compliance with current safety and utility construction standards or it has been red-tagged) at the time a request for a new or modified attachment is made.¹⁷ According to the Bureau, even if the new attacher might benefit from that type of

¹⁰ *Id.* at 16096-97, para. 1212 ("A utility or other party that uses a modification as an opportunity to bring its facilities into compliance with applicable safety or other requirements will be deemed to be sharing in the modification and will be responsible for its share of the modification cost."); *2018 Wireline Infrastructure Order*, 33 FCC Rcd at 7766, para. 121 (clarifying that new attachers "are not responsible for the costs associated with bringing poles or third-party equipment into compliance with current safety and pole owner construction standards to the extent such poles or third-party equipment were out of compliance prior to the new attachment").

¹¹ NCTA, Petition for Expedited Declaratory Ruling, WC Docket No. 17-84 (filed July 16, 2020), https://www.fcc.gov/ecfs/filing/107161552527661 (NCTA Petition). Unless otherwise noted, the citations herein to comments, replies, and *ex parte* presentations are to such documents filed in response to the NCTA Petition in WC Docket No. 17-84.

¹² *Id.* at 9-31.

¹³ *Id.* at 5-9.

¹⁴ Pole Replacement Declaratory Ruling, 36 FCC Rcd at 776, para. 2.

¹⁵ *Id*.

¹⁶ *Id.* at 779, para. 6.

¹⁷ Pole Replacement Declaratory Ruling, 36 FCC Rcd at 780-81, para. 8.

pole replacement, it is not "necessitated solely as a result" of the new attachment pursuant to the language in section 1.1408(b) of our rules and therefore the utility may not impose all make-ready costs of that pole replacement on the new attacher. ¹⁸ The Bureau based its clarification on the cost causation and cost sharing principles codified in section 1.1408(b). ¹⁹ We affirm the Bureau's findings in the *Pole Replacement Declaratory Ruling* as consistent with section 224, the Commission's rules, and past Commission precedent.

8. The record developed in response to the NCTA Petition indicates significant disagreement between utilities and attachers about when a pole replacement is not "necessitated solely" by a new attachment when the circumstances do not involve a preexisting violation or red-tagged pole.²⁰ We seek comment on these more ambiguous situations and the role the Commission should take in providing further guidance regarding pole replacements.²¹ We also take this opportunity to seek comment on additional scenarios in which financial responsibility for pole replacements should be shared by attachers and utilities and how those costs should be apportioned. Additionally, we seek comment on the scope of utility liability for pole attachment rate refunds when rates are found to be unjust and unreasonable.²²

¹⁸ *Id.* (relying on 47 CFR § 1.1408(b)).

¹⁹ *Id.* As the Bureau noted, the first two sentences of section 1.1408(b) set out the principle of cost sharing, stating that "[t]he cost of modifying a facility shall be borne by all parties that obtain access to the facility as a result of the modification and by all parties that directly benefit from the modification. Each party described in the preceding sentence shall share proportionately in the cost of the modification." *Id.* at 779, para. 7 (quoting 47 CFR § 1.1408(b)). The Bureau stated that this cost sharing language must be read in tandem with the cost causation language of the fourth sentence of section 1.1408(b), which states, "[n]otwithstanding the foregoing, a party with a preexisting attachment to a pole, conduit, duct or right-of-way shall not be required to bear any of the costs of rearranging or replacing its attachment if such rearrangement or replacement is necessitated solely as a result of an additional attachment or the modification of an existing attachment sought by another party." *Id.* (quoting 47 CFR § 1.1408(b)). The Bureau clarified that when the principles of cost causation and sharing are read together, "section 1.1408(b) stands for the proposition that parties benefitting from a modification share proportionately in the costs of that modification, unless such a modification is necessitated solely as a result of an additional or modified attachment of another party, in which case that party bears the costs of the modification." *Id.* at 779-80, para. 7.

²⁰ Compare NCTA Petition at 10 (arguing that "it is unjust and unreasonable for the pole owner to use the new attachment as an opportunity to upgrade the utility's own facilities and shift the entire cost to the new attacher. In such circumstances, the cost should be allocated fairly and proportionately between the pole owner and the new attacher to distinguish between the true economic costs associated with the attachment and the costs associated with 'betterment,' *i.e.*, improving the utility's facilities."); Crown Castle Comments at 8 ("Despite the Commission's Rules and policy that a new attaching entity should not bear the full costs of replacing poles as a condition of access, utilities routinely insist 'that a new attacher pay the full cost to replace an old pole with a new, upgraded one.'") with Xcel Energy Comments at 2-3 ("It is clearly established through the Commission's rules, policies, and precedent – as well as the legislative history of Section 224 – that attachers are expected and required to bear the entire amount of those capital costs that arise from the make-ready process, including pole replacements, in order to accommodate new attachments regardless of whether there is a benefit to the utility."); Edison Electric Institute et al. Comments at 14 ("[T]his is contrary to the Commission's long-standing policies under Section 224 that allow utilities to recover all of the costs of a modification that are attributable to new pole attachments. The Commission has long recognized that these costs are solely caused by the new attaching entity, which is solely responsible for reimbursing utilities for these costs.").

²¹ We note some commenters argue that the Commission lacks the legal authority to "shift the cost of pole replacements caused solely by attachers to pole owners." Letter from Aryeh Fishman, Associate G.C., EEI, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 17-84, 19-126, at 2 (filed Dec. 16, 2021); Letter from Randy Clarke, Vice President Federal Regulatory Affairs, Lumen, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 17-84 (filed Jan. 15, 2021) (documenting the legal and policy issues in the NCTA Petition).

²² See Petition for Declaratory Ruling of The Edison Electric Institute, WC Docket No. 17-84, at 1 (filed April 20, 2021) (EEI Petition), https://www.fcc.gov/ecfs/filing/10420059605067.

A. Determining the Applicability of Cost Causation and Cost Sharing

- 9. In the *Pole Replacement Declaratory Ruling*, the Bureau clarified, pursuant to the language in section 1.1408(b) of our rules, that when a new attachment request precipitates a pole replacement, but the pole must also be replaced for other reasons, the pole replacement is not "necessitated solely" by the new attachment and all of the parties that benefit from the replacement must share proportionally in the cost, including utilities.²³ Under this standard, and consistent with the *2018 Wireline Infrastructure Order*,²⁴ the Bureau made clear that this standard applies when the pole must be replaced due to a preexisting violation or because it has been red-tagged.²⁵
- 10. We seek comment on whether there are additional situations in which a pole replacement is not "necessitated solely" by a new attachment request. Is it possible for a *future* planned pole replacement to serve as grounds for concluding that the pole must be replaced for other reasons at the time of the new attachment request? If so, in what circumstances? For example, if the utility has already scheduled the requested pole for replacement one or two years after the new attachment request is made, could we deem that known and scheduled replacement as *necessary* at the time that the new attachment request is made and therefore consider the replacement of the pole to not be "necessitated solely" by the new attachment?²⁶ Should the Commission codify a definition of "necessitated solely" for the purposes of section 1.1408(b) and, if so, what should that definition be? When considering situations "necessitated solely" by a need to create capacity for a new attachment, should the term "capacity" refer to both additional space needed to accommodate the new attachment and/or the need for a stronger pole to increase loading capacity? Should the Commission codify a definition of "red-tagging" or other terminology that distinguishes between priority replacements that need to be performed immediately due to the status of a pole from non-priority replacements that may be implemented at a later time?
- 11. Even if a pole replacement is necessitated for a reason other than a new attachment request, section 1.1408(b) requires existing attachers (including the utility) to pay a proportional share of the replacement costs only if they "directly benefit" from the replacement.²⁸ The Commission has previously determined that an incidental benefit is not sufficient to hold these attachers accountable for

²³ Pole Replacement Declaratory Ruling, 36 FCC Rcd at 780-81, para. 8.

²⁴ 2018 Wireline Infrastructure Order, 33 FCC Rcd at 7766, para. 121 & n.450.

²⁵ Pole Replacement Declaratory Ruling, 36 FCC Rcd at 780-81, para. 8.

²⁶ See, e.g., Electric Utilities Comments at 12 & n.8 ("[I]n order to bring uniformity and clarity to the issue for purposes of this proceeding, the Electric Utilities are willing to stipulate that where a pole has been identified by the utility as requiring replacement within a six month period, and where an attacher subsequently applies to attach to that pole, the pole owner should pay for the replacement pole."); POWER Coalition Comments at 9 ("In all cases . . . it is not the practice of any POWER Coalition member to require a third party attacher to bear the cost of a pole replacement if the requested pole already is identified for replacement at the time of the access request."); Xcel Energy Comments at 9 ("[I]f a communications provider requests access for a new attachment to a pole that has been "red tagged" for replacement (i.e., is scheduled to be replaced within one year), Xcel Energy will coordinate the replacement of that pole with the communications provider's construction schedule and perform the replacement at Xcel Energy's own expense. In such cases, the new attacher would be responsible only for the incremental cost difference if accommodating the new attachment requires a pole that is taller and/or stronger than a pole sufficient to meet Xcel Energy's own needs.").

²⁷ The Commission has previously described a "red-tagged" pole as one found to be non-compliant with safety standards and placed on a utility's replacement schedule. *See 2018 Wireline Infrastructure Order*, 33 FCC Rcd at 7766, n.450. Crown Castle argues that the Commission should employ a broader definition that includes "any pole where, based on an existing condition, the utility contends the pole must be replaced before any new attachment, or change to an existing attachment, may be made." Letter from D. Van Fleet Boys, Senior Counsel, Utility Relations, Crown Castle, to Marlene H. Dortch, Secretary, FCC, WC Docket 17-84, at 2 (filed Mar. 9, 2022).

²⁸ 47 CFR § 1.1408(b).

the pole replacement costs.²⁹ When addressing additional circumstances to which the clarification in the *Pole Replacement Declaratory Ruling* should apply, if any, we ask that commenters specify whether any benefits that accrue to existing attachers are direct versus incidental and how they define those terms for the purposes of their arguments. We ask that commenters be clear about the criteria that distinguish a direct benefit from an incidental benefit and cite all economic and legal authorities that support their positions.

- 12 We seek comments specifically addressing whether a utility directly benefits from a pole replacement that is necessary to correct a preexisting violation that the utility did not cause. As stated in the 2018 Wireline Infrastructure Order, utilities may not hold new attachers responsible for the costs of correcting a preexisting violation.³⁰ That does not necessarily mean, however, that the utility is ultimately responsible for all of the costs in all cases. Rather, the party that is responsible for the violation is responsible for the costs of correcting the violation, and the utility is authorized to seek recovery from the violating party.³¹ What are the circumstances under which existing attachers, as opposed to utilities, may be responsible for preexisting violations that require an entire pole to be replaced? In such situations, are there wavs that a utility directly benefits from a pole replacement that corrects a preexisting violation within the meaning of the first two sentences of section 1.1408(b), even if it did not cause the violation? For instance, in concluding that a utility may not hold a new attacher responsible for costs arising from the correction of safety violations caused by other attachers, the former Cable Services Bureau determined that it was up to the utility "to require other attachers to reimburse [the utility] or otherwise pay for corrections of safety violations."³² In the 2018 Wireline Infrastructure Order, the Commission found that a utility may not hold a new attacher responsible for the costs of a preexisting violation caused by another attacher or delay the completion of make-ready to accommodate a new attachment while it "attempts to identify or collect from the party who should pay for correction of the preexisting violation."33 In the context of pole replacements, should we construe these precedents to mean that the utility is responsible for the costs of correcting the violation vis-à-vis the new attacher, and, therefore, directly benefits when the pole replacement needed to accommodate the new attachment corrects the violation? If so, does that financial responsibility and direct benefit require the utility to share in the costs of the replacement under section 1.1408(b)?
- 13. We also seek comment on how to identify and quantify the costs of a pole replacement that are proportional to the direct benefit obtained by a utility from a pole replacement that is not necessitated solely by a new attachment request. We remain committed to the long-standing principle that when "capital costs would not have been incurred 'but for' the pole attachment demand . . . the attacher—the cost causer—pays for these costs."³⁴ In the context of make-ready charges for a new

²⁹ See Local Competition Order, 11 FCC Rcd at 16097-98, paras. 1213, 1216 ("We recognize that limiting cost burdens to entities that initiate a modification, or piggyback on another's modification, may confer incidental benefits on other parties with preexisting attachments on the newly modified facility. Nevertheless, if a modification would not have occurred absent the action of the initiating party, the cost should not be borne by those that did not take advantage of the opportunity by modifying their own facilities.").

³⁰ 2018 Wireline Infrastructure Order, 33 FCC Rcd at 7766, para. 121.

³¹ Id. at 7767, para. 122.

³² Cavalier Telephone, LLC v. Virginia Electric and Power Co., Order and Request for Information, 15 FCC Rcd 9563, 9570-71, para. 16 (CSB 2000), vacated by settlement, 17 FCC Rcd 24414 (EB 2002) (Cavalier Telephone Order); see also Kansas City Cable Partners d/b/a Time Warner Cable of Kansas City v. Kansas City Power & Light Company, Consolidated Order, 14 FCC Rcd 11599, 11606, para. 19 (CSB 1999) (Kansas City Order) ("Correction of the pre-existing code violation is reasonably the responsibility of [the pole owner]").

³³ 2018 Wireline Infrastructure Order, 33 FCC Rcd at 7767, para. 122.

³⁴ 2011 Pole Attachment Order, 26 FCC Rcd at 5301, para. 143 & n.426 (2011); see also Kansas City Order, 14 FCC Rcd at 11607, para. 21 (stating that the attacher "should be responsible only for the actual costs for make-ready or change-out work which is made necessary because of [its] attachments").

attachment,³⁵ that includes the "direct incremental costs of making space available to the [attacher],"³⁶ but excludes costs that are not required to accommodate the new attachment.³⁷

- 14. How should we distinguish the incremental costs attributable to the new attacher from the costs that should be attributable to utilities when a pole replacement is necessary to make space for the new attachment *and* for a reason that directly benefits the utility? In the context of a pole that also needs to be replaced to correct a preexisting violation or because it has been red-tagged, should the new attacher be responsible for the difference in cost between a taller or stronger pole needed to accommodate its attachment and what it would cost to replace the existing pole with one of the same type and size or strength?³⁸ Is there a different way to apportion the cost of the new pole between its owner and the new attacher? How should other costs associated with pole replacements, such as the cost of transferring existing attachments to the new pole, be apportioned between the utility and new attacher? We ask that commenters submit data and documents describing and substantiating the precise costs of pole replacements in each scenario addressed above and specify the party that causes them to be incurred.
- 15. Finally, we seek comment on whether we should revise our cost allocation rules to modify or replace the direct benefit versus incidental benefit standard set forth in section 1.1408(b). Is there a more equitable and efficient standard for determining when parties should share in the costs of modifying a facility? What are the costs and benefits of applying an alternate standard? We ask that commenters proposing alternate standards detail how costs would be allocated under the proposed standard's terms in real-world scenarios, specifically addressing the economic and operational impacts on the parties, including whether the standard would allow utilities to fully recover the costs of establishing additional capacity on their poles. We also ask that commenters explain whether any proposed alternate standard would promote or deter broadband deployment or the ability of utilities and attachers to successfully negotiate pole attachment agreements, including whether it would lead to an increase or decrease in pole attachment disputes.

B. Allocating Costs When Utilities Directly Benefit from Pole Replacements

16. Attachers have represented to the Commission that utilities often seek to hold them responsible for *all* costs of replacing a pole that is needed to make space for a new attachment, even if all of those costs are not needed to accommodate the new attachment (e.g., pole upgrades, increasing

³⁵ Make-ready is "the modification or replacement of a utility pole, or of the lines or equipment on the utility pole, to accommodate additional facilities on the utility pole." 47 CFR § 1.1402(o). Make-ready charges to prepare a pole for a new attachment are "non-recurring costs for which the utility is directly compensated and as such are excluded from expenses used in the rate calculation." 2017 Wireline Infrastructure Order, 32 FCC Rcd at 11131, para. 7.

³⁶ Alabama Cable Telecomm. Ass'n et al. v. Alabama Power Co., Order, 16 FCC Rcd 12209, 12231, para. 48 (2001); 2011 Pole Attachment Order, 26 FCC Rcd at 5301, 5322, paras. 143, 185 ("The attacher causes the pole owner to incur costs if measures such as rearrangement or bracketing are performed, or if there is no space available on an existing pole to accommodate an attachment. . . . Pole owners have the opportunity to recover through makeready fees all of the capital costs caused by third-party attachers."); see also Xcel Energy Comments at 9 (stating that when it has scheduled a pole for reinforcement or replacement within one year, "the new attacher would be responsible only for the incremental cost difference if accommodating the new attachment requires a pole that is taller and/or stronger than a pole sufficient to meet Xcel Energy's own needs").

³⁷ Salsgiver Communications, Inc. v. North Pittsburgh Tel. Co., Memorandum Opinion and Order, 22 FCC Rcd 20536, 20546, para. 29 & n.87 (EB 2007) ("[C]osts not required to accommodate the attacher may not be imposed on the attacher.").

³⁸ See Xcel Energy Comments at 9, n.16 ("For example, if a 35-foot pole would be sufficient for Xcel Energy's needs, but a 40-foot pole is needed to accommodate the new attachment, the new attacher would be responsible only for the difference in cost between a 35-foot pole and a 40-foot pole. However, if a 35-foot pole could accommodate both Xcel Energy and the new attachment, the new attacher would not be responsible for any costs of the replacement.").

capacity beyond the needs of the new attachment).³⁹ While some utilities indicate that this is not the case and that new rules in this area are unnecessary, 40 others have not denied it or have attempted to justify it with a broad interpretation of the Commission's cost causation policy, i.e., but for the new attachment request, the pole replacement would not have occurred at all, so the attacher should pay all costs of the replacement.⁴¹ Stated differently, some utilities contend that while implementing a pole replacement is necessitated solely by the new attachment, they should be able to enhance the pole in some way that is not necessitated by the new attachment without incurring financial responsibility for those enhancements. Attachers have also argued that utilities receive a windfall when they hold new attachers responsible for all the costs of a pole replacement because it eliminates or reduces the costs they would have otherwise had to pay to replace the pole in the future (i.e., financial responsibility for the utility's deteriorating and aging infrastructure is shifted to the attacher).⁴² In particular, the white paper submitted by Charter's economist, Dr. Patricia Kraytin, states that "since the future replacement of the pole from the utility's perspective is 'an inevitable event' that it would eventually have to pay for itself, the practice of transferring the full cost of that replacement onto new attachers (who must either pay to obtain access or choose to abandon their investment plans) results in burdens to the attaching entity far exceeding the costs they actually cause the pole owner to incur over a more meaningful time horizon."43 Utilities counter that

³⁹ See, e.g., NCTA Petition at 10; Crown Castle Comments at 8; Charter Comments at 3 ("Despite the repeated admonitions that make-ready charges must be reasonable and limited to the costs actually caused by an attachment, pole owners frequently leverage their superior bargaining position to insist that an attacher seeking access must purchase a new pole for the utility and pay for its installation in full as a condition of attachment.").

⁴⁰ See POWER Coalition Comments at 2, 17-18 ("[T]he Commission has interpreted [section 224(h) of the Act], and its own rule to require simply that if a pole owner uses the opportunity of a modification requested by a third party to modify its own facility (for example, the comply with applicable safety requirements), it shares in the total costs associated with the modification."); Coalition of Concerned Utilities Reply at 4 ("No party disputes that utility pole owners are responsible for maintaining poles, and for making necessary repairs, upgrades and pole replacements."); Xcel Energy Reply at 3 ("The record also disproves the baseless and unfounded allegations made in the Petition and by its supporters that utilities deliberately underinvest in the maintenance and upkeep of their pole infrastructure in order to 'offload' these costs onto new attachers.").

⁴¹ Coalition of Concerned Utilities Comments at 29 (arguing that "40-year-old Commission precedent and four decades of industry practice" support "pole owners [being] reimbursed in full for pole replacements by communications attachers"); Xcel Energy Comments at 2-3; Edison Electric Institute et al. Comments at 14.

⁴² NCTA Petition at 8, 14 ("NCTA members regularly encounter demands by pole owners that they pay the full cost of replacing aging poles as a condition of access—even though (in the absence of the new attachment or overlash) the utility would have had to replace the same pole at its own cost in the near future, or (in many cases) should have already done so.") (emphasis in original); Crown Castle Comments at 4-5 ("Crown Castle supports NCTA's assertion that the costs associated with replacing poles, including purchasing and installing the replacement pole and removing the existing pole, would be incurred by the pole owner during the natural life of the pole, independent of any attachment. . . . Therefore, a new attacher 'is only precipitating the earlier incurrence of these costs, not causing them, and should therefore not bear them in full."") (quoting NCTA Petition at 18); ACA Connects Comments at 5 ("Where a utility has failed to maintain its poles, where poles are or will soon be scheduled for replacement, or earlier attachments involve safety violations, the replacement of a pole to accommodate a new attachment may trigger an attempt by the pole owner to impose the costs of maintaining its own infrastructure on the new attacher. contrary to longstanding Commission precedent. A utility receives an unlawful windfall when it does so, especially where poles are fully or largely depreciated or have deteriorated and are no longer safe."): Charter Comments at 3 ("As a practical matter, the common utility practice of charging the full replacement cost of a pole to the attacher means that the utility recovers far more than the costs that the attachment actually causes—the pole owner also obtains the additional windfall from advancing the upgrade of its facilities and shifting the entire cost of that upgrade onto the attacher.").

⁴³ Charter Comments at Attach., Patricia D. Kravtin, The Economic Case for a More Cost Causative Approach to Make-Ready Charges Associated with Pole Replacement in Unserved/Rural Areas: Long Overdue, But Particularly Critical Now in Light of the Pressing Need to Close the Digital Divide, at 9 (2020). There is much debate in the record on the conclusions reached by Dr. Kravtin regarding cost allocation and cost causation principles as they are (continued....)

the early retirement of their poles precipitated by a new attachment comes at a cost—the value they lose in a capital asset that has not yet reached the end of its useful life—and that under the Commission's cost causation policy, they are entitled to compensation for the unrealized value of a pole that would otherwise remain in service.⁴⁴

17. While we acknowledge that the economic and legal arguments made by utilities could have merit,⁴⁵ we are concerned by the frequent statements in the record that attachers are being required to absorb costs that are not caused by their attachments and/or result in attachers assuming financial responsibility for a utility's capital assets.⁴⁶ Our concern is rooted in the potential impact on the deployment of broadband networks if the financial resources available for deployments are depleted by

applied to pole replacements. *Compare, e.g.*, Crown Castle Reply at 13 ("The economic analysis in the expert report of Patricia D. Kravtin, submitted by Charter, further rebuts the arguments by pole owners that they have no economic incentive to demand pole replacements.") *with* Electric Utilities Reply at 11-13. We seek comment on the conclusions reached by Dr. Kravtin as they relate to the cost allocations and causes of pole replacements.

⁴⁴ Coalition of Concerned Utilities Comments at 13, 24-25 (arguing that "the premature replacement of pole plant when that capital has a greater need elsewhere is not a 'prudent' capital expenditure and so likely could not be included in a utility's rate base at all"); POWER Coalition Comments at 19 ("[P]remature pole replacement (*i.e.*, a replacement that occurs before a pole's end of life) is economically inefficient, and a detriment to the utility pole owner and its ratepayers, unless the associated costs are fully covered by the party that will reap the benefit of the new pole.").

⁴⁵ See, e.g., Letter from Aryeh Fishman, Assoc. General Counsel, Edison Electric Institute, and Brian M. O'Hara, Sr. Dir. Regulatory Issues, NRECA, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 17-84, at 4 (filed Dec. 17, 2020) (Edison Electric Institute/NRECA Dec. 17, 2020 Ex Parte Letter) ("In cases of insufficient capacity, where a pole owner requires replacement of a pole with a larger, stronger, or higher class of a pole, such work is performed solely to create capacity for the new attachment. This is not an exclusive modification or an 'upgrade' that is unnecessary or unreasonably required to accommodate the new attachment. When there is a need for a pole to be replaced because of lack of capacity, the new pole still must ensure safety, reliability and resiliency. Therefore, to accommodate the new load, the new pole must meet all applicable standards and requirements at the time of installation and the attaching entity is the cost-causer of this work. Under the Commission's policy, in this scenario, because the replacement of the pole is triggered by insufficient capacity, the attacher is the direct beneficiary and may incur up to the full cost of the work that would otherwise not be performed but for its request. Unless the pole owner uses the opportunity to add to or modify its own facility for its own exclusive use, it does not directly benefit from the pole replacement and does not bear any share of the pole replacement costs.").

⁴⁶ See, e.g., NCTA Petition at 10 (stating that it "is unjust and unreasonable for the pole owner to use the new attachment as an opportunity to upgrade the utility's own facilities and shift the entire cost to the new attacher"); Crown Castle Comments at 5-7 (describing "an underlying problem of utilities attempting to impose costs on new attachers for maintaining pole plant that the utility has failed to timely perform itself. Put simply, Crown Castle has repeatedly encountered utilities who have not invested in maintaining their pole plant, leaving deteriorating poles standing long after they should have been replaced in the normal course. . . . Utilities have an independent duty to maintain their poles and cannot shift pole maintenance responsibilities to their attachers"); Charter Comments at 15 ("In practical terms, pole owners are adding, to the costs caused by the attacher, additional costs associated with their own facilities upgrades, which the attacher did not cause.") (emphasis in original); ExteNet Comments at 4-5 ("The need for replacement may be . . . due to the pole's age and condition or because the pole lacks sufficient strength to support ExteNet's attachment. However, ExteNet often encounters a third reason: the utility simply wants the pole replaced, even though ExteNet's engineers have determined that the pole's condition and capacity is sufficient to support ExteNet's attachment. In such a case, ExteNet must choose between paying for the replacement pole or disputing the utility's demand and delaying the project."); Letter from John Windhausen Jr., Executive Director, SHLB Coalition, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 17-84, at Attach., Pole Attachment Principles to Expedite Broadband Deployment to Anchor Institutions and Their Communities June 28, 2021, at 2, para. 6 (filed Jan. 31, 2022) ("Imposing the entire pole replacement costs on new or existing attachers unfairly subsidizes the pole owner's plant (as the pole owner would have otherwise been responsible for replacement) and unreasonably drives up the cost of new broadband and communications deployment.").

these costs.⁴⁷ That said, we are keenly aware of the need to carefully examine the impact any changes to our cost allocation rules may have on the ability of utilities to fully recover the costs of expanding capacity to accommodate new attachments⁴⁸ to avoid the unintended consequence of increased attachment denials.⁴⁹

18. To evaluate and resolve these competing concerns, we seek comment on whether the Commission should revise its pole attachment rules to expressly recognize that utilities directly benefit from pole replacements that are precipitated by a new attachment request and establish clear standards for when and how utilities should be required to pay a proportional share of the total pole replacement costs. Would clear standards on these points expedite cost dispute resolution between the parties? Or, are any disputes likely to be fact-specific and better addressed in adjudicatory proceedings? Are further

⁴⁷ See, e.g., NCTA Petition at 16-17; ACA Connects Comments at 10 ("Like NCTA, ACA Connects members and other service providers reported that some utilities inflate their make-ready charges by including costs for work unrelated to their attachments, including for pole replacement work. . . . These fees alone regularly exceeded the ACA Connects member's estimated return on investment, resulting in the member forgoing buildouts entirely or engaging in more expensive underground deployments to avoid unjust and unreasonable make-ready charges."); Altice USA Comments at 2-3 ("As a condition of Altice attaching its equipment, pole owners commonly require Altice to pay the full cost of replacing poles, many of which are old and/or already crowded. Because they can be relatively significant in the context of the cost of a new build, pole replacement costs can undermine the return on investment for a particular build or at least delay the project, as Altice considers alternate, more cost-effective routes."); see also 2011 Pole Attachment Order, 26 FCC Rcd at 5241, para. 3 ("[L]ack of reliable, timely, and affordable access to physical infrastructure—particularly utility poles—is often a significant barrier to deploying wireline and wireless services.").

⁴⁸ Coalition of Concerned Utilities Comments at 11 ("Since the Commission began regulating pole attachments following the 1978 Pole Attachment Act, the Commission has held that utilities must be reimbursed for out-of-pocket costs incurred to accommodate new attachers.") (also quoting *Adoption of Rules for the Regulation of Cable Television Pole Attachments*, CC Docket No. 78-144, Memorandum Opinion and Second Report and Order, 72 FCC 2d 59, 79, para. 29 (1979) ("As indicated in the legislative history, pre-construction, survey, engineering, makeready, and change-out (non-betterment) costs are included in additional costs but only to the extent they are out-of-pocket expenses specifically attributable to CATV attachments or facilities.")); *2011 Pole Attachment Order*, 26 FCC Rcd at 5321, para. 183 (noting "Congress's understanding that pole attachments generally do not impose any capital costs on utilities that are not recovered fully in make-ready charges: 'Thus the only added cost to the utility resulting from the pole attachment would be administrative costs.'" (quoting 123 Cong. Rec. H5079-81 (daily ed. May 25, 1977) (statement of Rep. Wirth)).

⁴⁹ Section 224 does not provide the Commission with authority to require utilities to replace poles when additional capacity is needed to accommodate a new attachment. 47 U.S.C. § 224(f)(2); *Southern Company v. FCC*, 293 F.3d 1338, 1346-47 (11th Cir. 2002) ("Section 224(f)(2) carves out a plain exception to the general rule that a utility must make its plant available to third-party attachers. When it is agreed that capacity is insufficient, there is no obligation to provide third parties with access to that particular 'pole, duct, conduit, or right-of-way.'"); *2018 Wireline Infrastructure Order*, 33 FCC Rcd at 7753-54, para. 100; *2011 Pole Attachment Order*, 26 FCC Rcd at 5284, para. 95 ("As the court noted in *Southern Company*, mandating the construction of new capacity is beyond the Commission's authority."); *see also* Coalition of Concerned Utilities Comments at 8-9 (stating that "[t]he Pole Attachment Act clearly allows utilities to deny access to their facilities for lack of capacity"). Utility commenters argue that "[i]f utilities are no longer compensated for pole replacements and can no longer control the pole replacement process, many utility pole owners will decide they can no longer economically or safely replace poles on a voluntary basis for new attachers. The 'clarification' would deny new attachers access to poles that require replacement to accommodate them." Coalition of Concerned Utilities Comments at 17; *see also* Xcel Energy Comments at 15.

⁵⁰ We limit our inquiries to situations where a pole replacement is needed to accommodate a new attachment due to lack of capacity. We are aware of allegations by attachers that some utilities erroneously or disingenuously claim that an existing pole lacks capacity to accommodate a new attachment and insist that the pole must be replaced at the attacher's cost. *See* ExteNet Comments at 4-5. The rules clearly prohibit such conduct by utilities, and the Commission is fully capable of adjudicating such disputes through its complaint process, *see generally Kansas City Order*, and we believe that is the appropriate avenue for attachers asserting such claims to seek relief.

cost allocation rules for pole replacements unnecessary and/or could they result in more attachment requests being denied as some utilities claim?⁵¹

1. Responsibility for Pole Upgrades and Modifications Unrelated to New Attachments

Attachers have represented to the Commission that, when a pole replacement is needed to expand capacity for a new attachment, utilities use that pole replacement as an opportunity to upgrade a pole (e.g., increase its class or grade) or expand their own use of the pole in a manner that is unrelated to the new attachment (e.g., expand capacity for future use by the utility itself or to rent to a different attacher).⁵² When that occurs, attachers represent that they are held accountable for the cost of upgrade/expanded use modifications made at the same time as the make-ready for their new attachments.⁵³ According to NCTA, utilities insist that they are entitled to shift those costs to the new attacher because, even if the upgrade/expanded use modifications are not required to effectuate the new attachment, the utility would not have made them if a pole replacement had not been required to accommodate the new attachment.⁵⁴ Attachers argue that, under the Commission's rules and precedent, they may not be held accountable for such costs because they are not necessitated by the new attachment.⁵⁵ Utilities who shift the costs of upgrade/expanded use modifications to new attachers claim

⁵¹ See Electric Utilities Comments at 19; Coalition of Concerned Utilities Comments at 17; Xcel Energy Comments at 15; Edison Electric Institute/NRECA Dec. 17, 2020 Ex Parte Letter at 4; Letter from Robin F. Bromberg, Counsel to Georgia Power Co. et al., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 17-84, at 2 (filed Jan. 29, 2021) (Georgia Power et al. Jan. 29, 2021 Ex Parte Letter); Letter from Patrick R. Halley, Sr. V.P. Policy & Advocacy and G.C., USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 17-84, at 1-2 (filed Jan. 14, 2022) (arguing that the Commission should not commence a rulemaking because "[t]he Commission's current allocation of pole replacement costs dates back over 25 years. The rules are clear that the cost causer is responsible for pole make-ready charges, including pole replacements when necessary.").

⁵² NCTA Petition at 10; Crown Castle Comments at 9 ("Crown Castle has also encountered numerous situations where the pole owner demands that the new attaching party pay the full cost to install a larger, higher category pole than is required to accommodate the new attachment."); Charter Reply at 7 ("Several commenters have also raised concerns that pole owners continue to engage in practices already prohibited under the Commission's previous orders. These practices include . . . demanding that the new attacher pay to install a larger, higher category pole than is required to accommodate the attachment.").

⁵³ NCTA Petition at 14 ("[U]nder section 224(b) of the Commission's rules, pole owners may not assign to an attacher pole upgrade costs resulting in betterment to the owner simply because it was performed in connection with make-ready."); Charter Comments at 15 ("In practical terms, pole owners are adding, to the costs caused by the attacher, additional costs associated with their own facilities upgrades, which the attacher did not cause."); Crown Castle Comments at 2, 9 (stating that "Crown Castle has also encountered numerous situations where the pole owner demands that the new attaching party pay the full cost to install a larger, higher category pole than is required to accommodate the new attachment. Essentially, this situation is a utility upgrading its plant—not merely accommodating a new attachment—at the expense of the new attaching party"); INCOMPAS Comments at 12 ("While the FCC's Third Wireline Infrastructure Order has made some headway on pole attachment issues, utility companies are still finding new ways to squeeze broadband companies for costs that they did not cause, for upgrade investments that disproportionately benefit the utility, and for setting rates and safety standards in a way that conflicts with the underlying premise of the FCC's pole attachment and cost allocation rules.").

⁵⁴ NCTA Petition at 8; see also Edison Electric Institute et al. Comments at 3.

⁵⁵ NCTA Petition at 10; Crown Castle Comments at 12 ("Notably, the Commission should clarify that in cases where a pole owner performs a pole replacement to accommodate an attachment, it is unjust and unreasonable for the pole owner to use the new attachment as an opportunity to upgrade the utility's own facilities . . . and shift the entire cost to the new attacher."); Charter Comments at 15.

that,⁵⁶ as described above, the pole replacement required to accommodate the new attachment is the "but for" cause of those modification costs.⁵⁷

- 20. We seek comment on whether utilities directly benefit when they use pole replacements precipitated by an attachment request to upgrade or enhance their poles and whether utilities should pay a proportional share of the total pole replacement costs. As an initial matter, we seek comment on whether the Commission's existing cost allocation rules and precedent require clarification on this point. Section 1.1408(b) of the Commission's rules states, in pertinent part, that "[t]he costs of modifying a facility shall be borne . . . by all parties that directly benefit from the modification," and that each party that directly benefits from the modification shall share proportionally in its costs, but it then qualifies that language by stating, "[n]otwithstanding the foregoing, a party with a preexisting attachment to a pole . . . shall not be required to bear any of the costs of rearranging or replacing its attachment if such rearrangement or replacement is necessitated solely as a result of an additional attachment . . . sought by another party." If a pole upgrade is necessitated at the time a pole is replaced to create capacity for a new attachment, does the text of section 1.1408(b) allocate all costs of the pole replacement, including those for unrelated upgrade/expansion modifications, to the new attacher? Or does it merely shield other attachers, and not the utility, from bearing any upgrade costs?
- 21. In the *Local Competition Order*, the Commission stated that an attacher is responsible for the entire cost of a new pole needed to create new capacity for its attachment "unless [other parties with attachments] expanded their own use of the facilities at the same time." In the latter event, the other

⁵⁶ We note that some utilities have represented to the Commission that they do not hold new attachers responsible for pole upgrades that are not required by a new attachment and that new rules are unnecessary in this area. POWER Coalition Comments at 2 (stating that "if a pole replacement must be performed to cure a violation, or because the pole's physical condition has deteriorated to the point that a safety or reliability concern exists, the costs associated with the pole replacement are instead borne by the utility pole owner"); Xcel Energy Comments at 9 ("[I]f a communications provider requests access for a new attachment to a pole that has been 'red tagged' for replacement (i.e., is scheduled to be replaced within one year), Xcel Energy will coordinate the replacement of that pole with the communications provider's construction schedule and perform the replacement at Xcel Energy's own expense.").

⁵⁷ Xcel Energy Comments at 9-10 ("[W]hen a new attacher requests access that requires the replacement of a pole that is not otherwise scheduled for replacement, the attacher is responsible for the full cost of that replacement, which is outside of the ordinary course of business and would not be necessary but for the attacher's request By demanding replacement of a pole years or even decades before it is necessary for an electric utility to do so for its own operational needs, a new attacher is not 'precipitating the early incurrence' of these costs, but is in fact *causing* these costs.") (emphasis in original); Edison Electric Institute et al. Comments at 20 ("The Commission's longstanding policy has thus been that the pole owner recovers the entire associated capital costs through makeready fees, thus the additional costs that form the basis for the statutory minimum are the costs of access to the pole that would not have been incurred by the utility 'but for' the pole attachment request.").

⁵⁸ 47 CFR § 1.1408(b) (emphasis added). We note that the text of section 1.1408(b) does not appear to include replacing a pole after receiving a modification request as an instance of "piggybacking." The third sentence of the rule states that "[a] party with a preexisting attachment to the modified facility shall be deemed to directly benefit from a modification if, after receiving notification of such modification . . . it adds to or modifies its *attachment*." *Id.* (emphasis added). While a "facility" may include a pole and a "modification" includes replacing a pole, *see Local Competition Order*, 11 FCC Rcd at 16077, para. 1166, adding to or modifying an *attachment* is not the same thing as installing a new, upgraded pole. 47 U.S.C. § 224(a)(4) ("The term 'pole attachment' means any attachment by a cable television system or provider of telecommunications service *to* a pole, duct, conduit, or right-of-way owned or controlled by a utility.") (emphasis added).

⁵⁹ Local Competition Order, 11 FCC Rcd at 16077, para. 1166 ("If... a cable operator seeks to make an attachment on a facility that has no available capacity, the operator would bear the full cost of modifying the facility to create new capacity, such as by replacing an existing pole with a taller pole. Other parties with attachments would not share in the cost, unless they expanded their own use of the facilities at the same time."); see also 2011 Pole Attachment Order, 26 FCC Rcd at 5301, para. 143 ("Likewise, a pole owner recovers the entire capital cost of a new pole through make-ready charges from the new attacher when a new pole is installed to enable the attachment.").

parties that expanded their own use of the facilities would need to share in the cost of the new pole.⁶⁰ This language is broader than the text of section 1.1408(b) of the Commission's rules. Whereas the rule text speaks to pole replacements that are "necessitated solely as a result of" the new attachment,⁶¹ the language in the *Local Competition Order* addresses situations where the pole replacement is an "opportunity" for the utility and other attachers to "expand their own *use*" of the new pole.⁶²

- 22. We seek comment on how to reconcile these cost attribution standards in the Commission's rules and precedent in the context of a utility using a pole replacement that is "necessitated solely" by a new attachment request as an opportunity to upgrade the requested pole in a manner that is not required by the new attachment. Does section 1.1408(b) of our rules limit the cost-sharing statements in our precedent? Do the statements in our precedent establish a cost-sharing standard for a set of facts that is not contemplated by the codified rule?
- 23. Should the Commission address this issue by revising section 1.1408(b) to expressly create a presumption that utilities directly benefit when they use a pole replacement precipitated by a new attachment request as an opportunity to upgrade the pole or expand it for its own use and should, therefore, pay a proportional share of the pole replacement costs? If so, what are the specific circumstances to which such a presumption would apply? Specifically, we seek comment on when an upgrade or expanded use of a pole by a utility confers an incidental versus direct benefit to a utility. For instance, NCTA and other commenters urge us to require utilities to share in the costs of a pole replacement that results in the utility obtaining excess capacity for its own use.⁶³ The Commission has previously stated that, while that excess capacity may confer benefits on utilities,⁶⁴ utilities are not under any obligation to share the future revenue they may receive due to that excess capacity, even if they did

⁶⁰ Local Competition Order, 11 FCC Rcd at 16077, para. 1166; see also id. at 16096, para. 1212 ("[I]f an entity uses a proposed modification as an opportunity to adjust its preexisting attachment, the 'piggybacking' entity should share in the overall cost of the modification to reflect its contribution to the resulting structural change.").

^{61 47} CFR § 1.1408(b).

⁶² *Id.* at 16077, para. 1166 (emphasis added); *see also id.* at 16096-97, para. 1212 ("A utility or other party that uses a modification as an opportunity to bring its facilities into compliance with applicable safety or other requirements will be deemed to be sharing in the modification and will be responsible for its share of the modification cost.").

⁶³ See NCTA Petition at 22 ("If the new pole has greater capacity than the existing one, the utility further benefits from the opportunity to earn additional rents from later attachers, or to use the additional capacity for its own purposes, whether (in the case of an electric utility) in providing its core electric services or in facilitating the utility's own future entry into broadband markets."); Altice USA Comments at 3 ("The pole owner not only benefits in the form of a brand new, stronger and often taller pole for its own core electric utility purposes, but it also then has added capacity for future income producing attachments. Allowing pole owners to continue shifting the entire cost of pole replacements to attachers unjustly enriches the utilities and undermines ubiquitous broadband deployment."); ACA Connects Comments at 18-19 (stating that "as NCTA explains, exchanging older poles for newer ones confers benefits on the pole owner . . . [including] opportunities to bring in additional revenues"); Charter Comments at 37 ("Although Congress, and this Commission in its 1987 Order, recognized the concept of betterment/nonbetterment as it applied to make-ready cost allocations years ago, betterment concepts are often ignored in practice, despite the fact that the betterment gains to the utility from pole replacements are multifold. They include . . . revenue-enhancing benefits, including enhanced rental opportunities from the increased capacity on the new replacement pole.").

⁶⁴ See 2011 Pole Attachment Order, 26 FCC Rcd at 5322-23, para. 187 ("[B]ecause poles typically come in standard sizes, the utility is likely to obtain, at no cost to itself, capacity above and beyond the additional foot of pole space needed to accommodate the typical third-party attachment. The utility benefits from the extra capacity because it can use that capacity to supply is own services, rent the capacity to other third-party attachers and realize additional revenues, and/or save or defer some of the cost of periodic pole replacement needed to provide its own services.").

not share in the costs of the modification that created the excess capacity.⁶⁵ Further, the Commission found that excess pole capacity could be "particularly cumbersome" if it remains unused for extended periods.⁶⁶ Should these statements be understood to mean that the Commission has considered excess pole capacity to be an incidental benefit of a pole replacement rather than a direct benefit? Are there grounds for the Commission to conclude that excess capacity resulting from a pole replacement is a direct benefit to utilities and they should, therefore, share in the replacement costs? Are there other benefits that a utility obtains when a pole is replaced to accommodate a new attachment that the Commission should treat as incidental as opposed to direct? Or, as utilities claim, is it unnecessary to modify our rules to address cost allocation when utilities use a new attachment request that precipitates a pole replacement as an opportunity to upgrade the pole or expand it for its own use?⁶⁷ In addressing these questions, we ask that commenters be specific with respect to how they are defining incidental and direct benefits, their economic bases for those definitions, and how they apply or do not apply to each circumstance proposed as a benefit to utilities.

24. If the Commission were to adopt the presumption described above, what would be a proportional allocation of the costs of a pole replacement that is precipitated by a new attacher and then used as an opportunity for the utility to upgrade or expand its use of the pole? What are the incremental costs of upgrading the class or grade of the taller pole being installed to accommodate the new attachment? Should the new attacher be responsible for the difference in cost between a taller pole of a same type as the existing pole and the upgraded pole, along with other typical make-ready costs of a new attachment (e.g., the cost of transferring existing attachments to the new pole)? If not, what measure should be used? If the Commission revisits its position on the installation of excess pole capacity, should those costs be apportioned in a manner similar to when multiple attachers use an attachment request to

⁶⁵ Local Competition Order, 11 FCC Rcd at 16098, para. 1216 ("We recognize that in some cases a facility modification will create excess capacity that eventually becomes a source of revenue for the facility owner, even though the owner did not share in the costs of the modification.").

⁶⁶ Id. at 16097, para. 1213 ("We recognize that limiting cost burdens to entities that initiate a modification, or piggyback on another's modification, may confer incidental benefits on other parties with preexisting attachments on the newly modified facility. Nevertheless, if a modification would not have occurred absent the action of the initiating party, the cost should not be borne by those that did not take advantage of the opportunity by modifying their own facilities As for pole owners themselves, the imposition of cost burdens for modifications they do not initiate could be particularly cumbersome if excess space created by modifications remained unused for extended periods."); see also Electric Utilities Comments at 27 ("[C]reating excess capacity on utility poles does not necessarily mean that new attachers will flock to attach to them."); POWER Coalition Comments at 18 ("[E]ven if added space or capacity could itself be perceived as a benefit to the utility pole owner, the benefit would be incidental in nature, as the need for the taller pole was <u>caused</u> by a third party's attachment request, and was not the choice of the pole owner.") (emphasis in original); Edison Electric Institute et al. Comments at 3 (claiming that pole owners should not be responsible for pole replacement costs based on vague, indefinite and unquantifiable benefits, especially when these benefits are incidental to accommodating pole access requests).

⁶⁷ See, e.g., POWER Coalition Comments at 2, 17-18 (stating that the Act and the Commission's rules already require that "if a pole owner uses the opportunity of a modification requested by a third party to modify its own facility (for example, to comply with applicable safety requirements), it shares in the total costs associated with the modification"); Electric Utilities Comments at 12 & n.8 (stating that "the Electric Utilities are willing to stipulate that where a pole has been identified by the utility as requiring replacement within a six month period, and where an attacher subsequently applies to attach to that pole, the pole owner should pay for the replacement pole"); Xcel Energy Comments at 9 (stating that for "red tagged" poles, "Xcel Energy will coordinate the replacement of that pole with the communications provider's construction schedule and perform the replacement at Xcel Energy's own expense."); Coalition of Concerned Utilities Reply at 4 ("No party disputes that utility pole owners are responsible for maintaining poles, and for making necessary repairs, upgrades and pole replacements.").

upgrade their existing facilities, requiring expanded pole capacity, i.e., a ratio of the new space on the taller pole occupied by the new attacher to the total amount of excess capacity on the taller pole?⁶⁸

- 25. We also seek comment on whether adopting a presumption that utilities directly benefit from pole replacements precipitated by a new attachment when the utility uses the pole replacement as an opportunity to upgrade or expand its use of the pole would have a positive or negative effect on pole attachment negotiations and, relatedly, the deployment of broadband facilities. Would it facilitate and expedite successful negotiations by eliminating areas of dispute? Conversely, would it increase the frequency of pole attachment denials and delay the deployment of broadband networks due to utility concerns that they will not be fully compensated for the costs caused by the attachments? Are there potential adverse impacts for utility ratepayers? If so, would any of these adverse impacts be lessened if the Commission were to recognize specific circumstances under which the presumption could be rebutted? What would those circumstances be? What evidentiary showing would utilities need to make to substantiate that circumstances exist to rebut the presumption? Do these considerations vary based on whether the pole is located in an "unserved area," on how should that term be defined in this context?
- 26. Additionally, we seek comment on how the last sentence of section 1.1408(b) should be interpreted with respect to pole replacements. That sentence states, "If a party makes an attachment to the facility after the completion of the modification, such party shall share proportionately in the cost of the modification if such modification rendered possible the added attachment." What time period is reasonable "after" the pole replacement occurs for the subsequent attacher to share in the costs of the pole replacement? Would any subsequent attachment to a new pole be considered "rendered possible" by the pole replacement even if it occurred a significant time later?

2. Costs and Benefits of Early Pole Retirement

According to NCTA and other attachers, "[p]oles, like other utility infrastructure, have a finite life and require maintenance and intermittent replacement. Replacing an older pole with a new one necessarily allows the utility to defer the next scheduled replacement, including transfer of its facilities to the new pole, and reduces maintenance costs." In NCTA's view, "where existing utility infrastructure is . . . near the end of its useful life, it is unjust and unreasonable [under section 224(b) of the Act] for pole owners to shift the entire cost of a pole replacement to a new attacher when the pole owner itself derives the predominant financial gain, including in the form of betterment, from replacing and upgrading

⁶⁸ Local Competition Order, 11 FCC Red at 16096, para. 1211 ("Where multiple parties join in the modification, each party's proportionate share of the total cost shall be based on the ratio of the amount of new space occupied by that party to the total amount of new space occupied by all of the parties joining in the modification. For example, a [competitive access provider's (CAP)] access request might require the installation of a new pole that is five feet taller than the old pole, even though the CAP needs only two feet of space. At the same time, a cable operator may claim one foot of the newly-created capacity. If these were the only parties participating in the modification, the CAP would pay two-thirds of the modification costs and the cable operator one-third.").

⁶⁹ See Letter from Robert Branson, President and CEO, Multicultural Media, Telecom and Internet Council, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 17-84, at 1 (filed Mar. 9, 2022).

⁷⁰ 47 CFR § 1.1408(b).

⁷¹ See NCTA Petition at 22; see also ACA Connects Comments at 18-19 ("Because all poles have finite lives, the replacement of a pole enables a utility to defer — for many decades — another replacement of that asset. With that benefit comes the lower maintenance costs of a newer pole, and a variety of opportunities to bring in additional revenues."); Charter Comments at 37-38 ("[T]he betterment gains to the utility from pole replacements are multifold. They include: Capital cost savings associated with future planned plant upgrades and cyclical replacement programs; Operational cost savings in the form of lower maintenance and operating expenses inherent to features of the new, upgraded/higher-class replacement pole, or as a result of the earlier time shift of the removal and installation of the new pole, given the generally rising costs of labor and material over time as measured by published industry cost indices.").

the pole."⁷² Attachers argue that utilities should, therefore, be required to pay a proportional share of pole replacement costs whenever a pole is replaced to accommodate a new attachment, ⁷³ and irrespective of whether they have otherwise improved the pole.

28. Utilities counter that the attachers' position is barred by section 1.1408(b) of the Commission's rules, which mandates that new attachers bear the costs of pole replacements necessitated solely as a result of their new attachments.⁷⁴ They also assert that the attachers misstate or misunderstand the process and economics of scheduling a pole for replacement.⁷⁵ The record indicates that utilities use

⁷² NCTA Petition at 10; *see also* WIA Comments at 3 ("[B]ecause the pole owner continues to benefit from ownership of the pole, shifting all of the costs to the attacher would 'exceed just compensation' because the attacher has 'increase[d] the utility's asset value.") (quoting NCTA Petition at 12) (internal quotation marks omitted); Altice USA Comments at 3 ("The pole owner not only benefits in the form of a brand new, stronger and often taller pole for its own core electric utility purposes, but it also then has added capacity for future income producing attachments. Allowing pole owners to continue shifting the entire cost of pole replacements to attachers unjustly enriches the utilities"); Charter Comments at 11 ("[P]ole replacements bestow a significant amount of 'betterment' value on the utility . . . that would not exist 'but for' the new attachment request [R]equiring attachers to pay for this betterment value creates significant economic inefficiencies and is not consistent with just and reasonable pole attachment rates, terms, and conditions."). NCTA also argues that shifting the entire cost of a pole replacement to a new attacher is inconsistent with section 224(f) of the Act because it discriminates against new attachers "seeking to bring broadband to an unserved area by imposing unjust and unreasonable conditions upon access." NCTA Petition at 15.

⁷³ NCTA Petition at 19; ACA Connects Comments at 17 ("We thus agree with NCTA that a 'just and reasonable' allocation of pole replacement costs cannot allocate these [replacement] costs in their entirety (if at all) to an attaching party whose request for pole access initiates replacement of a pole. Rather, the attaching party should bear only any incremental costs it 'causes' in replacing the pole."); Crown Castle Comments at 2 ("Crown Castle agrees with NCTA, generally, and supports its request that the Commission reaffirm that the costs of replacing or upgrading a pole, including correcting pre-existing conditions, may not be shifted entirely to the newest entity to attach to a utility pole The cost should be allocated fairly and proportionately between the pole owner, any existing attachers, and the new attacher to distinguish between the true economic costs associated with the attachment and the costs associated with 'betterment,' i.e., improving the utility's facilities.").

⁷⁴ 47 CFR § 1.1408(b); Edison Electric Institute et al. Comments at 14 ("NCTA's argument hinges on the notion that pole owners are direct beneficiaries of pole replacements under 47 C.F.R. § 1.1408(b) of the Commission's Rules; however, this is contrary to the Commission's long-standing policies under Section 224 that allow utilities to recover all of the costs of a modification that are attributable to new pole attachments. The Commission has long recognized that these costs are solely caused by the new attaching entity, which is solely responsible for reimbursing utilities for these costs."); Coalition of Concerned Utilities Comments at 29 ("[T]he Petition's 'clarification' request runs contrary to 40-year-old Commission precedent and four decades of industry practice, pursuant to which pole owners have been reimbursed in full for pole replacements by communications attachers."); Xcel Energy Comments at 2-3 ("[W]hen an attacher requests access that requires the replacement of a pole that is not otherwise scheduled for replacement, the attacher is responsible for the full cost of that replacement, which would not be necessary but for the attacher's request. It is clearly established through the Commission's rules, policies, and precedent—as well as the legislative history of Section 224—that attachers are expected and required to bear the entire amount of those capital costs that arise from the make-ready process, including pole replacements, in order to accommodate new attachments regardless of whether there is a benefit to the utility.").

⁷⁵ See POWER Coalition Comments at 16 (arguing that "in cases where a pole is replaced before it has reached its end of life, the utility pole owner receives no direct benefit from the pole replacement that would prompt a requirement to share in its costs – and in fact, may be burdened by it"); Xcel Energy Comments at 10 ("Although every pole will, in theory, require replacement at some point in the future as part of a utility's regular maintenance schedule, that point might be anywhere from ten to fifty years away or longer By demanding replacement of a pole years or even decades before it is necessary for an electric utility to do so for its own operational needs, a new attacher is not 'precipitating the earlier incurrence' of these costs, but is in fact causing these costs."); Coalition of Concerned Utilities Comments at 24 ("Utilities currently replace aging pole plant on a regular maintenance schedule that is subject to the utility's control [A]ccelerating the replacement of poles by several decades prior to the end (continued....)

internal pole replacement programs to determine when a pole needs to be replaced because it is unsafe, unreliable, or unfit. These programs involve inspections scheduled at periodic intervals during which the condition of a pole is evaluated. The pole is deemed to be in poor condition or reaching the end of its useful life—a status that utilities emphasize is distinct from a pole's age. The utility will schedule it for replacement. The timing of that replacement appears to vary based on the provisions of a particular utility's replacement program, but a pole that is deteriorating but still safe and serviceable may not be scheduled for replacement for a period of years after the inspection. For example, the POWER Coalition explains that its members conduct their inspections at 8-10 year cycles and that if it is determined that a pole is not likely to remain serviceable until the next cycle (i.e., for another 8-10 years), it will be replaced in one to two years. Utilities argue that when those pole replacements are accelerated to create capacity for new attachments, they lose the value of their capital asset that is being retired before it has reached the end of its useful life. For these reasons, utilities dispute that they obtain a benefit

of their useful life is an incremental burden on electric utilities and their electric customers because they still have to replace all the other poles that actually have reached the end of their useful life.").

⁷⁶ POWER Coalition Comments at 8-9; Electric Utilities Comments at 12 n.8; Coalition of Concerned Utilities Comments at 23-24 ("Utilities currently replace aging pole plant on a regular maintenance schedule that is subject to the utility's control."); Xcel Energy Comments at 8 ("Xcel Energy also has an established pole inspection and maintenance program to ensure the integrity and resiliency of its system.").

⁷⁷ Electric Utilities Comments at 17; POWER Coalition Comments at 8-9; Xcel Energy Comments at 8-9; Coalition of Concerned Utilities Comments at 23 ("Based on regular inspections and in compliance with industry standards and state regulatory requirements, utilities each year replace a percentage of their aging pole plant.").

⁷⁸ Xcel Energy Comments at 5 ("[T]he actual service life of a pole is based entirely on the pole's *condition*—regardless of its age or its depreciated value—and recent surveys and studies have found that actual pole service lives generally exceed their depreciation service lives by a significant margin.") (emphasis in original); POWER Coalition Comments at 7-8, 19; Electric Utilities Comments at 22.

⁷⁹ POWER Coalition Comments at 4 ("[U]tility pole owners typically inspect their plant at scheduled intervals, and proactively replace poles as they reach their end of life. Such measures allow utility pole owners to maximize the return on their infrastructure investment, but at the same time, avoid the attendant risks as utility poles physically deteriorate over time."); Electric Utilities Comments at 17; Xcel Energy Comments at 9; Coalition of Concerned Utilities Comments at 24 ("Utilities currently replace aging pole plant on a regular maintenance schedule that is subject to the utility's control.").

⁸⁰ POWER Coalition Comments at 8-9; Xcel Energy Comments at 9; Electric Utilities Comments at 22 ("Depending on the condition of the pole, as revealed through the inspection process, a pole can last much longer than the average useful life. . . . There are many poles across the Electric Utilities distribution networks that are well beyond average service life but have many years of useful life remaining.").

⁸¹ The POWER Coalition states that poles that are not climbable will be replaced in 30 days. POWER Coalition Comments at 9. Xcel Energy states that it inspects all of its distribution poles at least once every twelve years, and poles that require reinforcement or replacement are reinforced or replaced within one year. Xcel Energy Comments at 9.

⁸² POWER Coalition Comments at 7; Electric Utilities Comments at 26 ("[T]he fact that an electric utility might be required to replace a pole anyway in 15 to 20 years is of no financial solace to the electric utility or its current ratepayers. The timing of infrastructure investment is a critical component in regulatory ratemaking. For example, if an electric utility reasonably projects a need for additional generation capacity in year 2040, but it will only take five years to obtain permits and construct the new generation facilities, it does not make financial sense for the electric utility or its ratepayers to begin the project now. The proper time for the electric utility to incur the costs is closer in time to the actual need."); Coalition of Concerned Utilities Comments at 24 (arguing that "accelerating the date by which a pole is replaced and facilities are transferred would deprive utilities of the time value of money by requiring them to spend money now on an unnecessary pole replacement that they otherwise would not have to spend until 10, 20, 30 or more years from now").

when a pole is replaced before the end of its useful life.⁸³ Rather, they argue that requiring a new attacher to pay the costs of the pole replacement ensures that utilities are compensated for, among other things,⁸⁴ the lost value of an asset that would otherwise remain in service for years.⁸⁵ Some utilities have also indicated that state-level oversight of their capital budgets and spending cycles limits their flexibility to assume increased capital expenditures in a given year to accommodate communications deployments.⁸⁶

29. We seek additional information and documents that will better substantiate the economic, legal, and practical implications of potentially revising our rules governing cost sharing. We are particularly interested in additional information and analyses that expand the economic arguments made by utilities and attachers, including those addressing their respective economic incentives and how our rules do or do not effectively align them. We recognize that our current cost sharing rules have been interpreted to shift the financial responsibility of utilities for maintaining and replacing their capital assets to attachers.⁸⁷ and that this shift inflates attachers' pole attachment costs.⁸⁸ We also recognize that the

⁸³ See POWER Coalition Comments at 16 (arguing that "in cases where a pole is replaced before it has reached its end of life, the utility pole owner receives no direct benefit from the pole replacement that would prompt a requirement to share in its costs – and in fact, may be burdened by it"); Coalition of Concerned Utilities Comments at 27-28 (noting that "even the State or Maine, which is the sole jurisdiction the Petition cites to support its request to modify pole replacement cost allocations, presumes that utility pole owners do not benefit from pole replacements"); Xcel Energy Reply at 7-8 ("The so-called 'efficiencies' and 'benefits' that Charter and others claim would be achieved by shifting the cost of premature pole replacements onto the electric utilities are thus entirely illusory.").

⁸⁴ Utilities are compensated for the cost of communications pole attachments through upfront fees for costs that would not be incurred by the utility "but for" the attachments (e.g., pre-construction surveys, engineering, makeready and pole replacements necessary to accommodate a new attachment), 2011 Pole Attachment Order, 26 FCC Rcd at 5296, para. 128, and through rental rates that "reflect a portion of operating expenses and capital costs that a utility incurs in owning and maintaining poles." *Id.*

⁸⁵ POWER Coalition Comments at 7 ("Because IOUs seek to maximize their infrastructure investment for the benefit of their ratepayers, a pole is not considered to reach its 'end of life' unless it is deemed to unsafe, unreliable, or unfit for further use."); Electric Utilities Comments at 22 ("Depending on the condition of the pole, as revealed through the inspection process, a pole can last much longer than the average useful life . . . allocating any of the cost of the accelerated replacement to the electric utility would deprive the electric utility of its ability to use that capital over the actual remaining useful life of the replaced pole."); Coalition of Concerned Utilities Comments at 28 ("[T]he speculative, questionable and/or nonexistent 'benefits' the Petition alleges do not outweigh the very real costs associated with wasting money to prematurely replace a perfectly good asset.").

⁸⁶ See Xcel Energy Comments at 13 (explaining that utilities must be able to fully recover additional capital costs of pole attachments because "Xcel Energy and other electric utilities establish their capital budgets and spending cycles based on an assessment of their own business and operational needs, and these budgets and spending cycles are subject to state regulatory oversight and approval. With this regulatory oversight comes capital preservation obligations and a mandate for efficient capital management, along with an obligation to minimize the impact of these budgets on electric ratepayers as much as is reasonably possible."); Coalition of Concerned Utilities Comments at 20.

⁸⁷ Crown Castle Comments at 8 ("When pole owners attempt to impose the entire cost of replacing poles on a new attacher, they are improperly seeking to shift the entire cost of the work that the pole owner should have performed or would have been required to perform itself."); Charter Comments at 10 (arguing that "since a utility today receives a windfall whenever a new attacher pays for the full replacement costs of a pole, the utility faces incentives to overstate the necessity of pole replacements or induce premature retirements in order to transfer these costs to the attacher"); ACA Connects Comments at 5 (arguing that "the replacement of a pole to accommodate a new attachment may trigger an attempt by the pole owner to impose the costs of maintaining its own infrastructure on the new attacher, contrary to longstanding Commission precedent").

⁸⁸ See WIA Comments at 2 ("Make-ready costs, like pole replacements, are a substantial expense for broadband deployment. As a result, excessive make-ready costs can present a major hindrance to building out networks in unserved or underserved areas."); Charter Comments at 4-5 ("Charter can confirm from its own experience that the (continued....)

ability of utilities to deny access to their poles due to insufficient capacity, ⁸⁹ together with the substantial cost to attachers having to deploy underground infrastructure in lieu of an attachment, ⁹⁰ potentially confers significant leverage to utilities that may disadvantage attachers in negotiations to obtain what they believe is an equitable allocation of pole replacement costs. ⁹¹ Utilities counter that if they are prevented from fully realizing the value of their infrastructure assets when a new attachment request requires the early retirement of an otherwise serviceable pole, there is little incentive for them to approve the request. ⁹²

30. We seek comment on whether revising our pole attachment rules to require utilities to pay some portion of the costs of replacing a pole that is necessitated solely to accommodate a new attachment would better align the economic incentives of the parties, or whether it would, as some

cost of pole replacements factors significantly into its expenditures in bringing broadband to unserved, rural areas, and operates as a barrier towards further network expansion in those areas."); ACA Connects Comments at 4 (arguing that "utilities often charge unjust and unreasonable pole replacement fees that impede the deployment of network infrastructure through new attachments").

^{89 47} U.S.C. § 224(f)(2); Southern Company v. FCC, 293 F.3d 1338, 1346 (11th Cir. 2002); 2018 Wireline Infrastructure Order, 33 FCC Rcd at 7754, para. 100; 2011 Pole Attachment Order, 26 FCC Rcd at 5284, para. 95.

⁹⁰ See 2011 Pole Attachment Order, 26 FCC Rcd at 5242, para. 4 ("When Congress granted the Commission authority to regulate pole attachments, it recognized the unique economic characteristics that shape relationships between pole owners and attachers. Congress concluded that '[o]wing to a variety of factors, including environmental or zoning restrictions' and the very significant costs of erecting a separate pole network or entrenching cable underground, 'there is often no practical alternative [for network deployment] except to utilize available space on existing poles."") (quoting S. Rep. No. 580, 95th Congress, 1st Sess. at 13 (1977) (1977 Senate Report)); see also Crown Castle Comments at 10 (stating with respect to one deployment for which aerially was deemed cost prohibitive, "[a]lthough Crown Castle was able to deploy its facilities underground, that is still significantly more costly than the aerial attachment that should have been available (for example, in lieu of the approximately \$150,000 to replace the utility's poles, Crown Castle spent approximately \$62,000 to dig trenches and place the facilities underground—a sum that is still nearly ten times higher than would have been the typical make-ready cost for aerial attachment)."); ACA Connects Comments at 5 (stating that "pole replacement fees that seek a recovery of the entire cost to replace the pole and transfer the existing attachments may cause service providers to abandon deployments or pursue attachment alternatives like undergrounding that tend to be more expensive than aerial attachments"); Coalition of Concerned Utilities Comments at 17-18 ("It is generally understood that installing cables underground is more expensive and time consuming than attaching them to poles.").

⁹¹ See ExteNet Comments at 5 ("Where, as is often the case, the cost of replacing the pole is outweighed by the cost of the dispute and the resulting delay (plus the loss of goodwill with the utility) ExteNet reluctantly acquiesces to the utility's demand."); INCOMPAS Comments at 12 ("Broadband attachers are being taken advantage of by utilities because there is currently an economic advantage to do so through the lack of clarity on pole replacement cost apportionment."); Charter Comments at 28 ("A third-party attacher has effectively no practical, feasible alternative to paying the make-ready charges: the alternatives of going underground is often prohibitively high, and as is well established, the building of a duplicative network of poles simply not feasible. In theory and in practice, the utility as monopoly owner of the pole network has extraordinary leverage over the attacher.").

⁹² See Electric Utilities Comments at 19 ("[E]lectric utilities are generally supportive of capacity expansion because electric utilities, at present, are reimbursed for their actual cost to replace the pole NCTA's proposed rule, if granted, would put electric utilities in the undesirable position of either absorbing the vast majority of make-ready pole replacement costs or denying access altogether."); Coalition of Concerned Utilities Comments at 24 (arguing that "depleting funds and diverting resources from a capital budget that is designed to meet carefully planned, vital electric system reliability infrastructure investments, in favor of the premature replacement of distribution poles, would be unwise, a waste of money, and potentially unrecoverable in utility rate cases"); Edison Electric Institute/NRECA Dec. 17, 2020 Ex Parte Letter at 4 ("If a company were to be limited to cost recovery under the NCTA Petition, the very likely result would be that it would no longer be feasible for that company to agree to voluntarily replace poles to expand capacity.").

utilities suggest, simply incent utilities to deny access to the pole in this circumstance.⁹³ If we were to revise our rules on this point, what standards or formula should be used to apportion the costs between the utility, the new attacher, and any other existing attachers? Should we adopt NCTA's suggestion that new attachers be responsible for the remaining net book value of the pole being replaced, measured by the average depreciated bare pole investment derived using the Commission's pole attachment rate formula?⁹⁴ If we were to adopt that standard, what, if any, additional costs would need to be allocated to the new and/or existing attachers to ensure that utilities are compensated for the costs of attachments to their poles?⁹⁵ What, if any, impact would the standard proposed by NCTA have on pole attachment rates, costs borne by existing attachers other than the utilities, and utility ratepayers?⁹⁶ Is there a different standard of cost allocation that would better balance the incentives of the parties, be administratively simple to apply, and be more amenable to utilities? Have states that regulate pole attachments adopted rules specifying how to allocate the upfront cost to replace a pole between utilities and attachers that the Commission should consider adopting or modifying for its own use?

31. We also seek comment on the relationship between the upfront costs incurred to replace a pole versus the recovery of pole replacement costs through recurring pole attachment rates. Specifically,

⁹³ See Electric Utilities Comments at 19; Coalition of Concerned Utilities Comments at 17; Xcel Energy Comments at 15; Edison Electric Institute/NRECA Dec. 17, 2020 Ex Parte Letter at 4; Georgia Power et al. Jan. 29, 2021 Ex Parte Letter at 2 (arguing that "NCTA's proposal would require electric utilities to reconsider their historical willingness to replace poles to expand capacity for attachers (based on the fact that they are reimbursed their actual costs) rather than exercising their right to deny access for insufficient capacity under Section 224(f)(2)").

⁹⁴ NCTA Petition at 11, 23; *see also* Charter Comments at 11 (arguing that "the primary cost that attachers should be responsible for is the unrecovered net book value of the retired pole, which would perhaps otherwise become a 'stranded cost'"); Crown Castle Reply at 16 (agreeing with NCTA that "attachers should, at most, only be responsible for the costs associated with changing the timing of inevitable pole replacements, plus any documented and verifiable additional costs actually caused by the attacher"); ACA Connects Comments at 17-18 (arguing that for poles that have remaining useful life but "insufficient capacity," a utility that puts in a pole to accommodate a new attachment request may charge the new attacher a make-ready fee only to recover (1) the remaining net book value, if any, of the existing (to be replaced) pole less salvage value (2) the incremental costs of installing a pole larger than the existing pole to accommodate the new attachment; and (3) a proportion of the costs to transfer existing electrical attachments to the new pole that is equal to the percentage of the original net book value that remains in the pole); ExteNet Comments at 6 ("The total pole replacement cost should be the remaining book value of the pole being replaced, allocated between the pole owner and the attacher pursuant to the FCC's pole attachment formula."); Altice USA Comments at 3 (arguing that "attachers should be responsible, at most, for a proportionate share of the cost of replacing a pole that reflects the depreciated value of the pole").

⁹⁵ See POWER Coalition Comments at 20 ("At a minimum, a direct beneficiary of pole replacement must incur a portion of the substantial costs of labor, facility transfers, and the new pole itself."); Coalition of Concerned Utilities Comments at 14-15 (arguing for "the entire material cost of the new pole, along with the entire labor cost to install the new pole, the entire labor cost to replace the old pole, and the entire labor cost to transfer existing attachments to the new pole").

⁹⁶ See Xcel Energy Comments at 16 (stating that a utility would have to divert capital from its own business and operational needs if required to bear all but the incremental bare pole cost of a pole replacement, or "[a]lternatively, the recovery of the associated costs of the pole replacement would have to be allocated to the utility's rate base and would therefore be borne by the utility's own electric service customers, rather than by the entity that is causing these costs to be incurred"). The Electric Utilities argue that shifting some of the cost of pole replacements to utilities "would actually discriminate against existing attachers that have already paid the actual cost of make-ready necessary to accommodate their attachments." Electric Utilities Comments at 14; see also Edison Electric Institute et al. Reply at 11. According to the Electric Utilities "[i]f electric utilities are bearing the vast majority of make-ready pole replacement costs, then those costs will be booked to the appropriate capital and O&M accounts (principally FERC Accounts 364 and 593), which will, in turn, lead to an increase in pole attachment rates paid by all attaching entities subject to the FCC's formulas." Electric Utilities Comments at 14 ("This would have the effect of increasing the pole attachment rates paid by existing telecom carriers and cable television providers (many of whom will receive no 'benefit' from the pole replacement and some of whom may already have paid for a make-ready pole replacement).").

would it be more efficient and effective to require all costs incurred to replace a pole (except where a pole replacement is solely necessitated by a new attachment) to be recovered over time through the allowance for depreciation reflected in recurring rates calculated pursuant to the Commission's pole attachment rate formulas, rather than upfront through make-ready fees? Would the utility be made whole for early replacement of a structurally sound pole through the allowance for depreciation expense reflected in recurring pole rental rates, given the use of accurate depreciation rates?⁹⁷ Do utilities use group depreciation for poles? Do utilities' pole depreciation rates equally reflect the probability of late pole replacement, relative to average expected useful life, and the probability of early replacement, whether caused by the addition of an attachment or by some other reason? Under this approach, would the allowance reflected in recurring pole attachment rates through the application of the rate of return component of the carrying charge rate to the net cost of a bare pole, as in the Commission's rate formula, 98 fully compensate the utility for the cost of capital used to finance the remaining undepreciated cost of a replacement pole? Pole replacement costs (other than for pole replacements solely necessitated by a new attachment) under this approach would be allocated in the same way that capital, maintenance, and administrative costs are allocated under the Commission's recurring pole attachment rate formulas.⁹⁹ Would this approach reduce barriers to entry and at the same time send efficient pricing signals for pole investment and broadband deployment? Would this approach reduce cost allocation and rate disputes related to pole replacement? Could such an approach be used for recovery of all upfront pole replacement costs, regardless of the reason for replacement? What are the advantages and disadvantages of such an approach?

- 32. If we were to adopt a standard for allocating the costs of a pole replacement precipitated by a new attachment between utility and attachers, should utilities be able to contest that the allocation is sufficiently compensatory during negotiations with attachers and, if necessary, in complaint proceedings at the Commission, and what showing would be required for them to do so?¹⁰⁰
- 33. To help us understand the scale of the pole replacement costs at issue, we seek data from attachers for a broad sample of recent, large broadband network buildouts showing the total number of poles to which they attached and, of those poles, the number for which they paid the full cost to replace an existing pole. For each project identified, we ask that attachers specify the total non-recurring costs of the project (i.e., costs for the physical material of the poles and any and all other assets, such as fiber and electronic equipment, and labor costs for design, engineering, and construction of the network) and the total non-recurring cost specifically for replacement poles. We ask that attachers and utilities provide

⁹⁷ See, e.g., Altice USA Comments at 4 ("The FCC's cable attachment rate formula is a relatively simple and efficient way to assign costs to attaching entities. It relies primarily upon publicly available pole owner actual cost data to derive the average net investment per pole. This average reflects the cost of brand new, undepreciated poles as well as older, depreciated poles, and therefore more likely than not actually produces a cost (born by the attacher) that is greater than the cost of the typically older poles being replaced."); NTCA Reply at 5; but see Xcel Energy Comments at 9 (arguing that "the purpose of depreciation is to determine when the investment on an asset has been returned, not the actual useful service life of the asset. NCTA therefore improperly correlates the economic depreciation of a pole to the pole's actual useful service life. In fact, the actual service life of a pole is based entirely on the pole's condition – regardless of its age or its depreciated value – and recent surveys and studies have found that actual pole service lives generally exceed their depreciation service lives by a significant margin.") (emphasis in original).

⁹⁸ See 47 CFR § 1.1406(d).

⁹⁹ See id.

¹⁰⁰ See Free State Foundation Comments at 4 ("[T]he Commission ought to adopt a formula for apportioning pole attachment replacement costs . . . [and] could supplement such formula with a process by which pole owners have opportunity to demonstrate, upon clear and convincing evidence, that providers seeking attachments have caused or will cause specific and unique financial costs that they should be obligated to cover."); Altice USA Comments at 4 ("A pole owner's ability to . . . demonstrate that a pole is actually newer and more valuable than the average pole (as proposed in the [NCTA] Petition) adequately protects pole owners against under recovery.").

information concerning the condition of the poles that were replaced and their status within the utility's pole inspection and replacement program, including any available information concerning the term of the pole's useful life. We also request that utilities provide data from their year-end 2021 accounts showing: (1) gross pole investment; (2) accumulated pole depreciation expense; (3) accumulated deferred income taxes attributable to poles; (4) net pole investment (i.e., gross pole investment minus accumulated depreciation expense minus accumulated deferred income taxes, a result that is equivalent to the net cost of a bare pole under the Commission's pole attachment formulas); and (5) pole investment excluded from gross pole investment (to avoid double recovery of the same pole costs through the collection of both non-recurring make-ready and recurring rental fees).

34. We seek comment on whether revising our cost sharing rules to recognize that utilities directly benefit from pole replacements needed to create capacity for new attachments and should pay a proportional share of those costs would have a positive or negative impact on the negotiation of pole attachment agreements and broadband deployment. As the Commission has previously recognized, section 224 of the Act does not authorize us to mandate that utilities replace poles to create capacity for new attachments. We ask that commenters supporting or recommending specific cost allocation methodologies address why their favored solution will expedite pole attachment approvals without increasing denials, benefit consumers by connecting more people to broadband, and otherwise be in the public interest. We also seek comment on whether there are constraints on a utility's ability to deny attachment based on lack of capacity, such as the nondiscrimination requirement in section 224(f)(2) of the Act. Of the Act.

C. Avoiding and Resolving Disputes Between Utilities and Attachers

35. In addition to the questions above, we seek comment on additional measures that the Commission could adopt that would enable attachers and utilities to avoid pole replacement disputes and/or quickly resolve them when they occur. For instance, ExteNet argues that the Commission should require utilities to provide potential attachers with information concerning the condition of, and replacement plans for, their poles. 104 Would disputes concerning the need for pole replacements and associated costs be avoided if attachers had access to such information when planning their deployments? What specific data points would utilities need to provide potential attachers for such disputes to be avoided? What mechanism could utilities use to provide such information to attachers if required to do so (e.g., an internal utility database) and what costs would be associated with establishing the mechanism(s)? Does the Commission have jurisdiction to require utilities to provide potential attachers with information concerning the status of their poles? Are there any other revisions or additions that the Commission can make to its rules that would enable parties to avoid disputes concerning pole replacements or facilitate the private resolution of those disputes? Beyond the topic of pole replacements, are there other recurring issues with the pole attachment process that hinder the ability of broadband providers to deploy new facilities? Are there other infrastructure-related barriers that broadband providers are facing in their

¹⁰¹ See, e.g., ACA Connects Comments at 19 (requesting that "the Commission should require a utility to disclose sufficient information about the condition of such poles and the attachments thereto to enable the attacher to verify that the charges it is being assessed are just and reasonable and consistent with the other rules proposes herein").

¹⁰² 2011 Pole Attachment Order, 26 FCC Rcd at 5284, para. 95; see also Xcel Energy Comments at 15 ("[U]tilities are not required to undertake pole replacements in order to accommodate new attachments . . . limit[ing] attachers' responsibility for pole replacements to the incremental cost of a bare pole would result in such voluntary pole replacements being no longer economically viable for a regulated utility.").

¹⁰³ 47 U.S.C. § 224(f)(2) ("[A] utility providing electric service may deny a cable television system or any telecommunications carrier access to its poles, ducts, conduits, or rights-of-way, on a non-discriminatory basis where there is insufficient capacity and for reasons of safety, reliability and generally applicable engineering purposes.").

¹⁰⁴ ExteNet Comments at 6-7.

efforts to quickly deploy broadband? What steps should the Commission take to address these and other problems that may arise, and to accelerate their resolution?

- When pole replacement disputes cannot be avoided or resolved privately by the parties, are there additional procedures the Commission should adopt to expedite the resolution of pole attachment complaints? In November 2017, the Commission established a 180-day shot clock for the Enforcement Bureau to resolve pole access complaints. 105 NCTA argues that the Commission should take the additional step of announcing policies favoring the placement of pole attachment complaints arising in unserved areas on the Accelerated Docket, 106 which requires that proceedings on a complaint be concluded within 60 days.¹⁰⁷ We seek comment on whether such a step is necessary given the 180-day shot clock for pole access complaints and the discretion already afforded to Commission staff to place a complaint on the Accelerated Docket if they deem it suitable. 108 We seek comment on the specific criteria the Commission would include in a policy that would guide Commission staff on when pole attachment complaints should be placed on the Accelerated Docket. For example, should the Commission's policy take into account the number and complexity of the claims, need for discovery, need for expert affidavits, and ability of the parties to stipulate to facts? If the Commission were to adopt a policy that favors including pole attachment complaints on the Accelerated Docket, should it be limited to complaints that raise only discrete pole access issues and do not require the Commission to consider whether a rate, term, or condition of attachment is unjust or unreasonable? We also seek comment on any other procedural mechanisms that would expedite the resolution of complaints before the Commission concerning pole replacements. We also seek comment on whether there is additional clarity the Commission can provide on the scope of refunds available under the Commission's existing rules¹⁰⁹ governing pole attachment complaints.¹¹⁰
- 37. The Commission, as part of its continuing effort to advance digital equity for all,¹¹¹ including people of color, persons with disabilities, persons who live in rural or Tribal areas, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty

¹⁰⁵ 47 CFR § 1.1414; 2017 Wireline Infrastructure Order, 32 FCC Rcd at 11132-34, paras. 9-13.

¹⁰⁶ NCTA Petition at 27-29.

¹⁰⁷ 47 CFR § 1.736(a).

^{108 47} CFR § 1.736(d).

¹⁰⁹ 47 CFR § 1.1407(a)(3) (stating, in pertinent part, that "[t]he refund or payment will normally be the difference between the amount paid under the unjust and/or unreasonable rate, term, or condition and the amount that would have been paid under the rate, term, or condition established by the Commission, plus interest, consistent with the applicable statute of limitations").

¹¹⁰ See EEI Petition at 1 (asking the Commission to clarify "(1) that the 'applicable statute of limitations' under Rule 1.1407(a)(3) is the same as the two-year limitations period set forth in 47 U.S.C. § 415(b), and (2) that it is not 'appropriate' for complainants to recover refunds for periods that precede good faith notice of a dispute"); see also Verizon Maryland LLC v. The Potomac Edison Co., Proceeding No. 19-355, Bureau ID No. EB-19-MD-009, Memorandum Opinion and Order, FCC 20-167, at paras. 40-46 (Nov. 23, 2020) (concluding that the Commission should apply a "borrowing rule" to pole attachment complaints that looks to the law of the state where the utility poles are located, determines the state cause of action most analogous to the claims at issue, and applies the statute of limitations governing that cause of action); Bellsouth Telecomms., LLC v. Florida Power and Light Co., Proceeding No. 19-187, Bureau ID No. EB-19-MD-006, Memorandum Opinion and Order, DA 21-57, at paras. 9-15 (EB Jan. 14, 2021); Bellsouth Telecomms., LLC v. Duke Energy Florida, LLC, Proceeding No. 20-276, Bureau ID No. EB-20-MD-003, Memorandum Opinion and Order, DA 21-1008, at paras. 56-64 (EB Aug. 27, 2021); Bellsouth Telecomms., LLC v. Duke Energy Progress, LLC, Proceeding No. 20-293, Bureau ID No. EB-20-MD-004, Memorandum Opinion and Order, DA 21-1174, paras. 58-63 (EB Sept. 21, 2021).

¹¹¹ Section 1 of the Communications Act of 1934 as amended provides that the FCC "regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex." 47 U.S.C. § 151.

or inequality, invites comment on any equity-related considerations¹¹² and benefits (if any) that may be associated with the proposals and issues discussed herein. Specifically, we seek comment on how our proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well the scope of the Commission's relevant legal authority.

IV. PROCEDURAL MATTERS

- Ex Parte Rules. This proceeding shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's ex parte rules. 113 Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the ex parte presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, then the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with 47 CFR § 1.1206(b). In proceedings governed by 47 CFR § 1.49(f), or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's ex parte rules.
- 39. *Initial Regulatory Flexibility Analysis*. Pursuant to the Regulatory Flexibility Act, ¹¹⁴ the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and actions considered in the Second Further Notice. The text of the IRFA is set forth in Appendix A. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Second Further Notice. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of the Second Further Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration. ¹¹⁵
- 40. Filing of Comments and Reply Comments. Interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by paper.¹¹⁶

¹¹² The term "equity" is used here consistent with Executive Order 13985 as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. *See* Exec. Order No. 13985, 86 Fed. Reg. 7009, Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (January 20, 2021).

^{113 47} CFR. §§ 1.1200 et seq.

^{114 5} U.S.C. § 603.

¹¹⁵ See 5 U.S.C. § 603(a).

¹¹⁶ In response to the COVID-19 pandemic, the Commission has closed its current hand-delivery filing location at FCC Headquarters. We encourage outside parties to take full advantage of the Commission's electronic filing (continued....)

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: https://www.fcc.gov/ecfs/.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each
 filing. If more than one docket or rulemaking number appears in the caption of this proceeding,
 filers must submit two additional copies for each additional docket or rulemaking number.

Paper filings can be sent by first-class or overnight commercial or U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- Filings by commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- Filings by U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, DC 20554.
- People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).
- 41. *Contact Person*. For further information about this proceeding, contact Michael Ray, FCC Wireline Competition Bureau, Competition Policy Division, 45 L Street, NE, Washington, DC 20554, (202) 418-0357, Michael.Ray@fcc.gov.
- 42. Paperwork Reduction Act Analysis. This document contains proposed information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

V. ORDERING CLAUSES

- 43. Accordingly, IT IS ORDERED that, pursuant to sections 1-4, 201, and 224 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, 201, and 224, this Second Notice of Proposed Rulemaking IS ADOPTED.
- 44. IT IS FURTHER ORDERED that the Commission's Consumer & Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Second Further Notice of Proposed

system. Any party that is unable to meet the filing deadline due to the building closure may request a waiver of the comment or reply comment deadline, to the extent permitted by law. FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Filing, Public Notice, 35 FCC Rcd 2788 (2020), https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy.

Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch Secretary

APPENDIX A Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities from the policies and rule changes proposed in this Second Further Notice. The Commission requests written public comment on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Second Further Notice. The Commission will send a copy of the Second Further Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the Second Further Notice and IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need for, and Objectives of, the Proposed Rule Changes

- 2. The Second Further Notice seeks comment on ways to eliminate or expedite the resolution of pole replacement disputes by establishing clear standards for when and how the cost causation and cost sharing requirements in section 1.1408(b) of the Commission's rules apply to pole replacements. The Second Further Notice specifically seeks comment on situations in which a pole replacement is not "necessitated solely" by a new attachment request, whether and to what extent utilities directly benefit from various types of pole replacements, and if the Commission should establish standards for when utilities should be required to pay a proportional share of pole replacement costs. Additionally, the Second Further Notice seeks comment on whether the Commission should adopt an express presumption with regard to whether utilities directly benefit when they use pole replacements precipitated by attachment requests to upgrade or enhance their poles, as well as whether the Commission has previously embraced or rejected such a presumption. Comments are also sought regarding the circumstances in which such a presumption would apply, how relevant costs would be allocated, and whether this presumption would positively or negatively impact pole attachment negotiations and, relatedly, broadband deployment.
- The Second Further Notice also seeks comment on the costs and benefits of early pole retirements. Specifically, when retiring a pole early to accommodate a new attachment, the Second Further Notice seeks comment on whether a revision of the Commission's pole attachment rules to require utilities to pay a portion of the costs of the pole replacement would help to align parties' economic incentives. The Second Further Notice seeks comment on whether it would be more efficient and effective to require all costs incurred to replace a structurally sound pole for reasons other than insufficient capacity to be recovered over time through the allowance for depreciation reflected in recurring rates calculated pursuant to the Commission's pole attachment rate formulas, rather than upfront through make-ready fees. It also seeks comment on whether a revision of the Commission's cost sharing rules to recognize that utilities directly benefit from pole replacements that create capacity for new attachments and should thus pay a proportional share of the costs would positively or negatively affect negotiations of pole attachment agreements and broadband deployment. The Second Further Notice seeks comment on whether the Commission should explicitly define certain key terms related to pole replacements and the rules governing them, including "necessitated solely" and "red-tagged." Finally, the Second Further Notice seeks comment on measures the Commission could adopt to avoid disputes concerning pole replacements and expedite the resolution of complaints concerning pole replacements and provide more clarity with respect to the scope of refunds and payments that may be ordered if the Commission determines that a pole attachment rate, term, or condition is unjust and unreasonable.

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See 5 U.S.C. § 603(a).

³ *Id*.

B. Legal Basis

4. The proposed action is authorized under sections 1-4, 201, 202, 214, 224, 251, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-54, 201, 202, 214, 224, 251, and 303(r).

C. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply

- 5. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.⁴ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small-business concern" under the Small Business Act." A "small-business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.
- 6. Small Businesses, Small Organizations, Small Governmental Jurisdictions. Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three broad groups of small entities that could be directly affected herein.8 First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration's (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.9 These types of small businesses represent 99.9% of all businesses in the United States, which translates to 32.5 million businesses.¹⁰
- 7. Next, the type of small entity described as a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations. Nationwide, for tax year 2020, there

⁴ 5 U.S.C. § 604(a)(4).

⁵ 5 U.S.C. § 601(6).

⁶ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

⁷ 15 U.S.C. § 632.

⁸ See 5 U.S.C. § 601(3)-(6).

⁹ See SBA, Office of Advocacy, Frequently Asked Questions, "What is a small business?," https://cdn.advocacy.sba.gov/wp-content/uploads/2021/11/03093005/Small-Business-FAQ-2021.pdf (Nov 2021).

¹⁰ *Id*.

¹¹ See 5 U.S.C. § 601(4).

¹² The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C § 601(5) that is used to define a small governmental jurisdiction. Therefore, the IRS benchmark has been used to estimate the number small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations — Form 990-N (e-Postcard), "Who must file," https://www.irs.gov/charities-non-profits/annual-electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard. We note that the IRS data do not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.

were approximately 447,689 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.¹³

8. Finally, the small entity described as a "small governmental jurisdiction" is defined generally as "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." U.S. Census Bureau data from the 2017 Census of Governments¹⁵ indicate that there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number there were 36,931 general purpose governments (county¹⁷, municipal and town or township¹⁸) with populations of less than 50,000 and 12,040 special purpose governments - independent school districts with enrollment populations of less than 50,000. Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of "small governmental jurisdictions."

¹³ See Exempt Organizations Business Master File Extract (EO BMF), "CSV Files by Region," https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO BMF data for businesses for the tax year 2020 with revenue less than or equal to \$50,000, for Region 1-Northeast Area (58,577), Region 2-Mid-Atlantic and Great Lakes Areas (175,272), and Region 3-Gulf Coast and Pacific Coast Areas (213,840) which includes the continental U.S., Alaska, and Hawaii. This data does not include information for Puerto Rico.

¹⁴ See 5 U.S.C. § 601(5).

¹⁵ See 13 U.S.C. § 161. The Census of Governments survey is conducted every five (5) years compiling data for years ending with "2" and "7". See also Census of Governments, https://www.census.gov/programs-surveys/cog/about.html.

¹⁶ See U.S. Census Bureau, 2017 Census of Governments – Organization Table 2. Local Governments by Type and State: 2017 [CG1700ORG02], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). See also tbl.2. CG1700ORG02 Table Notes_Local Governments by Type and State_2017.

¹⁷ See id. at tbl.5. County Governments by Population-Size Group and State: 2017 [CG1700ORG05], https://www.census.gov/data/tables/2017/econ/gus/2017-governments html. There were 2,105 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

¹⁸ See id. at tbl.6. Subcounty General-Purpose Governments by Population-Size Group and State: 2017 [CG1700ORG06], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. There were 18,729 municipal and 16,097 town and township governments with populations less than 50,000.

¹⁹ See id. at tbl.10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2017 [CG1700ORG10], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. There were 12,040 independent school districts with enrollment populations less than 50,000. See also tbl.4. Special-Purpose Local Governments by State Census Years 1942 to 2017 [CG1700ORG04], CG1700ORG04 Table Notes_Special Purpose Local Governments by State Census Years 1942 to 2017.

²⁰ While the special purpose governments category also includes local special district governments, the 2017 Census of Governments data does not provide data aggregated based on population size for the special purpose governments category. Therefore, only data from independent school districts is included in the special purpose governments category.

²¹ This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,931) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (12,040), from the 2017 Census of Governments - Organizations tbls.5, 6 & 10.

1. Internet Access Service Providers

- 9. Wired Broadband Internet Access Service Providers. (Wired ISPs). Providers of wired broadband internet access service include various types of providers except dial-up internet access providers. Wireline service that terminates at an end user location or mobile device and enables the end user to receive information from and/or send information to the internet at information transfer rates exceeding 200 kilobits per second (kbps) in at least one direction is classified as a broadband connection under the Commission's rules.²² Wired broadband internet services fall in the Wired Telecommunications Carriers industry.²³ The SBA small business size standard for this industry classifies firms having 1,500 or fewer employees as small.²⁴ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.²⁵ Of this number, 2,964 firms operated with fewer than 250 employees.²⁶ Additionally, according to Commission data on internet access services as of December 31, 2018, nationwide there were approximately 2,700 providers of connections over 200 kbps in at least one direction using various wireline technologies.²⁷ The Commission does not collect data on the number of employees for providers of these services, therefore, at this time we are not able to estimate the number of providers that would qualify as small under the SBA's small business size standard. However, in light of the general data on fixed technology service providers in the Commission's 2020 Communications Marketplace Report, 28 we believe that the majority of wireline internet access service providers can be considered small entities.
- 10. Internet Service Providers (Non-Broadband). Internet access service providers using client-supplied telecommunications connections (e.g., dial-up ISPs) as well as VoIP service providers using client-supplied telecommunications connections fall in the industry classification of All Other Telecommunications.²⁹ The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small.³⁰ For this industry, U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year.³¹ Of those firms, 1,039

²² See 47 CFR § 1.7001(a)(1).

²³ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

²⁴ See 13 CFR § 121.201, NAICS Code 517311.

²⁵ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

²⁶ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

²⁷ See IAS Status 2018, Fig. 30 (The technologies used by providers include aDSL, sDSL, Other Wireline, Cable Modem and FTTP). Other wireline includes: all copper-wire based technologies other than xDSL (such as Ethernet over copper, T-1/DS-1 and T3/DS-1) as well as power line technologies which are included in this category to maintain the confidentiality of the providers.

²⁸ See Communications Marketplace Report, GN Docket No. 20-60, 2020 WL 8025117 at 44, paras. 34-35, Figs. II.B.2-4, 6. (2020) (2020 Communications Marketplace Report).

²⁹ See U.S. Census Bureau, 2017 NAICS Definition, "517919 All Other Telecommunications," https://www.census.gov/naics/?input=517919&year=2017&details=517919.

³⁰ See 13 CFR § 121.201, NAICS Code 517919.

³¹ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 517919, https://data.census.gov/cedsci/table?y=2017&n=517919&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

had revenue of less than \$25 million.³² Consequently, under the SBA size standard a majority of firms in this industry can be considered small.

2. Wireline Providers

- 11. Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks.³³ Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services.³⁴ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.³⁵ Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.³⁶
- 12. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.³⁷ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.³⁸ Of this number, 2,964 firms operated with fewer than 250 employees.³⁹ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 5,183 providers that reported they were engaged in the provision of fixed local services.⁴⁰ Of these providers, the Commission estimates that 4,737 providers have 1,500 or fewer employees.⁴¹ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.
- 13. Local Exchange Carriers (LECs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include both incumbent and competitive local exchange service providers. Wired

³² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term ReceiptsRevenueServices.

³³ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

³⁴ *Id*.

³⁵ *Id*.

³⁶ Fixed Local Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, and Other Local Service Providers. Local Resellers fall into another U.S. Census Bureau industry group and therefore data for these providers is not included in this industry.

³⁷ See 13 CFR § 121.201, NAICS Code 517311.

³⁸ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

³⁹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁴⁰ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

⁴¹ *Id*.

Telecommunications Carriers⁴² is the closest industry with an SBA small business size standard.⁴³ Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.⁴⁴ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁴⁵ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁴⁶ Of this number, 2,964 firms operated with fewer than 250 employees.⁴⁷ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 5,183 providers that reported they were fixed local exchange service providers.⁴⁸ Of these providers, the Commission estimates that 4,737 providers have 1,500 or fewer employees.⁴⁹ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

14. *Incumbent Local Exchange Carriers (Incumbent LECs)*. Neither the Commission nor the SBA have developed a small business size standard specifically for incumbent local exchange carriers. Wired Telecommunications Carriers⁵⁰ is the closest industry with an SBA small business size standard.⁵¹ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁵² U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁵³ Of this number, 2,964 firms operated with fewer than 250 employees.⁵⁴ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 1,227 providers that reported they were incumbent local

⁴² See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁴³ See 13 CFR § 121.201, NAICS Code 517311.

⁴⁴ Fixed Local Exchange Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

⁴⁵ Id

⁴⁶ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁴⁷ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁴⁸ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

⁴⁹ *Id*.

⁵⁰ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁵¹ See 13 CFR § 121.201, NAICS Code 517311.

⁵² *Id*.

⁵³ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁵⁴ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

exchange service providers.⁵⁵ Of these providers, the Commission estimates that 929 providers have 1,500 or fewer employees.⁵⁶ Consequently, using the SBA's small business size standard, the Commission estimates that the majority of incumbent local exchange carriers can be considered small entities.

- developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include several types of competitive local exchange service providers. Wired Telecommunications Carriers is the closest industry with an SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 3,956 providers that reported they were competitive local exchange service providers. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.
- 16. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for Interexchange Carriers. Wired Telecommunications Carriers⁶⁴ is the closest industry with an SBA small business size standard.⁶⁵ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁶⁶ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry

⁵⁵ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf.

⁵⁶ *Id*

⁵⁷ Competitive Local Exchange Service Providers include the following types of providers: Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

⁵⁸ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁵⁹ See 13 CFR § 121.201, NAICS Code 517311.

⁶⁰ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁶¹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁶² Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

⁶³ *Id*

⁶⁴ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁶⁵ See 13 CFR § 121.201, NAICS Code 517311.

⁶⁶ Id.

for the entire year.⁶⁷ Of this number, 2,964 firms operated with fewer than 250 employees.⁶⁸ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 151 providers that reported they were engaged in the provision of interexchange services. Of these providers, the Commission estimates that 131 providers have 1,500 or fewer employees.⁶⁹ Consequently, using the SBA's small business size standard, the Commission estimates that the majority of providers in this industry can be considered small entities.

- a small business size standard specifically for operator service providers. The closest applicable industry with an SBA small business size standard is Wired Telecommunications Carriers. The SBA small business size standard classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 32 providers that reported they were engaged in the provision of operator services. Of these providers, the Commission estimates that all 32 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, all of these providers can be considered small entities.
- 18. Other Toll Carriers. Neither the Commission nor the SBA has developed a definition for small businesses specifically applicable to Other Toll Carriers. This category includes toll carriers that do not fall within the categories of interexchange carriers, operator service providers, prepaid calling card providers, satellite service carriers, or toll resellers. Wired Telecommunications Carriers⁷⁶ is the closest industry with an SBA small business size standard.⁷⁷ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁷⁸ U.S. Census

⁶⁷ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁶⁸ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁶⁹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf.

⁷⁰ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁷¹ See 13 CFR § 121.201, NAICS Code 517311.

⁷² See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

 $^{^{73}}$ Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁷⁴ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

⁷⁵ *Id*.

⁷⁶ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁷⁷ See 13 CFR § 121.201, NAICS Code 517311.

⁷⁸ *Id*.

Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁷⁹ Of this number, 2,964 firms operated with fewer than 250 employees.⁸⁰ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 115 providers that reported they were engaged in the provision of other toll services.⁸¹ Of these providers, the Commission estimates that 113 providers have 1,500 or fewer employees.⁸² Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

3. Wireless Providers—Fixed and Mobile

- 19. The broadband Internet access service provider category covered by these new rules may cover multiple wireless firms and categories of regulated wireless services.⁸³ Thus, to the extent the wireless services listed below are used by wireless firms for broadband Internet access service, the actions may have an impact on those small businesses as set forth above and further below. In addition, for those services subject to auctions, we note that, as a general matter, the number of winning bidders that claim to qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments and transfers or reportable eligibility events, unjust enrichment issues are implicated.
- 20. Wireless Telecommunications Carriers (except Satellite). This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves.⁸⁴ Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services.85 The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.86 U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.87 Of that number, 2,837 firms employed fewer than 250

⁷⁹ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁸⁰ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁸¹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

⁸² *Id*.

⁸³ This includes, among others, the approximately 800 members of WISPA, including those entities who provide fixed wireless broadband service using unlicensed spectrum. *See* WISPA, *About WISPA*, https://www.wispa.org/About-Us/Mission-and-Goals (last visited June 27, 2019). We also consider the impact to these entities today for the purposes of this FRFA, by including them under the "Wireless Providers – Fixed and Mobile" category.

⁸⁴ See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

⁸⁵ *Id*.

⁸⁶ See 13 CFR § 121.201, NAICS Code 517312.

⁸⁷ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

employees.⁸⁸ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 797 providers that reported they were engaged in the provision of wireless services.⁸⁹ Of these providers, the Commission estimates that 715 providers have 1,500 or fewer employees.⁹⁰ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

- 21. Wireless Communications Services. Wireless Communications Services (WCS) can be used for a variety of fixed, mobile, radiolocation, and digital audio broadcasting satellite services. Wireless spectrum is made available and licensed for the provision of wireless communications services in several frequency bands subject to Part 27 of the Commission's rules. Wireless Telecommunications Carriers (except Satellite) satellite) to these services. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. Of this number, 2,837 firms employed fewer than 250 employees. Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.
- 22. The Commission's small business size standards with respect to WCS involve eligibility for bidding credits and installment payments in the auction of licenses for the various frequency bands included in WCS. When bidding credits are adopted for the auction of licenses in WCS frequency bands, such credits may be available to several types of small businesses based average gross revenues (small, very small and entrepreneur) pursuant to the competitive bidding rules adopted in conjunction with the requirements for the auction and/or as identified in the designated entities section in Part 27 of the Commission's rules for the specific WCS frequency bands.⁹⁶
- 23. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small

⁸⁸ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁸⁹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

⁹⁰ Id.

⁹¹ See 47 CFR §§ 27.1 – 27.1607.

⁹² See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

⁹³ See 13 CFR § 121.201, NAICS Code 517312.

⁹⁴ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁹⁵ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

 $^{^{96}}$ See 47 CFR §§ 27.201 – 27.1601. The Designated entities sections in Subparts D – Q each contain the small business size standards adopted for the auction of the frequency band covered by that subpart.

business size standard.

- 24. *1670–1675 MHz Services*. These wireless communications services can be used for fixed and mobile uses, except aeronautical mobile.⁹⁷ Wireless Telecommunications Carriers (except Satellite)⁹⁸ is the closest industry with an SBA small business size standard applicable to these services. The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.⁹⁹ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹⁰⁰ Of this number, 2,837 firms employed fewer than 250 employees.¹⁰¹ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.
- 25. According to Commission data as of November 2021, there were three active licenses in this service. The Commission's small business size standards with respect to 1670–1675 MHz Services involve eligibility for bidding credits and installment payments in the auction of licenses for these services. For licenses in the 1670-1675 MHz service band, a "small business" is defined as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$40 million for the preceding three years, and a "very small business" is defined as an entity that, together with its affiliates and controlling interests, has had average annual gross revenues not exceeding \$15 million for the preceding three years. The 1670-1675 MHz service band auction's winning bidder did not claim small business status. The 1670-1675 MHz service band auction's winning bidder did not claim small business status.
- 26. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.
- 27. Wireless Telephony. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. The closest applicable industry with an SBA small business size standard is Wireless Telecommunications Carriers (except Satellite). The size

⁹⁷ See 47 CFR § 27.902.

⁹⁸ See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

⁹⁹ See 13 CFR § 121.201, NAICS Code 517312.

¹⁰⁰ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false

¹⁰¹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹⁰² Based on an FCC Universal Licensing System search on November 8, 2021, https://wireless2 fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = BC; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹⁰³ See 47 CFR § 27.906(a).

¹⁰⁴ See 1670–1675 MHz Band Auction Closes; Winning Bidder Announced; FCC Form 600s Due May 12,2003, Public Notice, DA-03-1472, Report No. AUC-03-46-H (Auction No.46) (May 2, 2003).

¹⁰⁵ See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

standard for this industry under SBA rules is that a business is small if it has 1,500 or fewer employees. ¹⁰⁶ For this industry, U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated for the entire year. ¹⁰⁷ Of this number, 2,837 firms employed fewer than 250 employees. ¹⁰⁸ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 407 providers that reported they were engaged in the provision of cellular, personal communications services, and specialized mobile radio services. ¹⁰⁹ Of these providers, the Commission estimates that 333 providers have 1,500 or fewer employees. ¹¹⁰ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

- 28. Broadband Personal Communications Service. The broadband personal communications services (PCS) spectrum encompasses services in the 1850-1910 and 1930-1990 MHz bands.¹¹¹ The closest industry with an SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (except Satellite).¹¹² The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹¹³ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹¹⁴ Of this number, 2,837 firms employed fewer than 250 employees.¹¹⁵ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.
- 29. Based on Commission data as of November 2021, there were approximately 5,060 active licenses in the Broadband PCS service. The Commission's small business size standards with respect to Broadband PCS involve eligibility for bidding credits and installment payments in the auction of licenses for these services. In auctions for these licenses, the Commission defined "small business" as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$40 million for the preceding three years, and a "very small business" as an entity that, together with its affiliates and controlling interests, has had average annual gross revenues not exceeding \$15 million for

¹⁰⁶ See 13 CFR § 121.201, NAICS Code 517312.

¹⁰⁷ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

¹⁰⁸ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹⁰⁹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

¹¹⁰ *Id*.

¹¹¹ See 47 CFR § 24.200.

¹¹² See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

¹¹³ See 13 CFR § 121.201, NAICS Code 517312.

¹¹⁴ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

¹¹⁵ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹¹⁶ Based on an FCC Universal Licensing System search on November 16, 2021, https://wireless2 fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = CW; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

the preceding three years.¹¹⁷ Winning bidders claiming small business credits won Broadband PCS licenses in C, D, E, and F Blocks.¹¹⁸

- 30. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.
- 31. Broadband Personal Communications Service. The broadband personal communications services (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission initially defined a "small business" for C- and F-Block licenses as an entity that has average gross revenues of \$40 million or less in the three previous calendar years. For F-Block licenses, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years. These standards, defining "small entity" in the context of broadband PCS auctions, have been approved by the SBA. No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that claimed small business status in the first two C-Block auctions. A total of 93 bidders that claimed small business status won approximately 40% of the 1,479 licenses in the first auction for the D, E, and F Blocks. On April 15, 1999, the Commission completed the reauction of 347 C-, D-, E-, and F-Block licenses in Auction No. 22. Of the 57 winning bidders in that auction, 48 claimed small business status and won 277 licenses.
- 32. Specialized Mobile Radio Licenses. Special Mobile Radio (SMR) licenses allow licensees to provide land mobile communications services (other than radiolocation services) in the 800 MHz and 900 MHz spectrum bands on a commercial basis including but not limited to services used for voice and data communications, paging, and facsimile services, to individuals, Federal Government entities, and other entities licensed under Part 90 of the Commission's rules. Wireless Telecommunications Carriers (except Satellite)¹²⁴ is the closest industry with an SBA small business size standard applicable to these services. The SBA size standard for this industry classifies a business as

¹¹⁷ See 47 CFR § 24.720(b).

¹¹⁸ See Federal Communications Commission, Office of Economics and Analytics, Auctions, Auctions 4, 5, 10, 11, 22, 35, 58, 71 and 78, https://www.fcc.gov/auctions.

¹¹⁹ See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap; Amendment of the Commission's Cellular/PCS Cross-Ownership Rule, Report and Order, 11 FCC Rcd 7824, 7850-52, paras. 57-60 (1996) (PCS Report and Order); see also 47 CFR § 24.720(b).

¹²⁰ See PCS Report and Order, 11 FCC Rcd at 7852, para. 60.

¹²¹ See Alvarez Letter 1998.

¹²² See Broadband PCS, D, E and F Block Auction Closes, Public Notice, Doc. No. 89838 (rel. Jan. 14, 1997).

¹²³ See C, D, E, and F Block Broadband PCS Auction Closes, Public Notice, 14 FCC Rcd 6688 (WTB 1999). Before Auction No. 22, the Commission established a very small standard for the C Block to match the standard used for F Block. See Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees, Fourth Report and Order, 13 FCC Rcd 15743, 15768, para. 46 (1998).

¹²⁴ See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

small if it has 1,500 or fewer employees.¹²⁵ For this industry, U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.¹²⁶ Of this number, 2,837 firms employed fewer than 250 employees.¹²⁷ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 119 providers that reported they were of SMR (dispatch) providers.¹²⁸ Of this number, the Commission estimates that all 119 providers have 1,500 or fewer employees.¹²⁹ Consequently, using the SBA's small business size standard, these 119 SMR licensees can be considered small entities.¹³⁰

- 33. Based on Commission data as of December 2021, there were 3,924 active SMR licenses. However, since the Commission does not collect data on the number of employees for licensees providing SMR services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard. Nevertheless, for purposes of this analysis the Commission estimates that the majority of SMR licensees can be considered small entities using the SBA's small business size standard.
- 34. Lower 700 MHz Band Licenses. The lower 700 MHz band encompasses spectrum in the 698-746 MHz frequency bands. Permissible operations in these bands include flexible fixed, mobile, and broadcast uses, including mobile and other digital new broadcast operation; fixed and mobile wireless commercial services (including FDD- and TDD-based services); as well as fixed and mobile wireless uses for private, internal radio needs, two-way interactive, cellular, and mobile television broadcasting services. Wireless Telecommunications Carriers (except Satellite)¹³³ is the closest industry with an SBA small business size standard applicable to licenses providing services in these bands. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the

¹²⁵ See 13 CFR § 121.201, NAICS Code 517312.

¹²⁶ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePrevie w=false.

¹²⁷ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹²⁸ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

¹²⁹ *Id*.

¹³⁰ We note that there were also SMR providers reporting in the "Cellular/PCS/SMR" classification, therefore there are maybe additional SMR providers that have not been accounted for in the SMR (dispatch) classification.

¹³¹ Based on an FCC Universal Licensing System search on December 15, 2021, https://wireless2 fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match radio services within this group", Radio Service = SMR; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹³² See Federal Communications Commission, Economics and Analytics, Auctions, Auctions 44, 49, 60: Lower 700 MHz Band, Fact Sheet, Permissible Operations, https://www.fcc.gov/auction/44/factsheet, https://www.fcc.gov/auction/49/factsheet, https://www.fcc.gov/auction/49/factsheet.

¹³³ See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

¹³⁴ See 13 CFR § 121.201, NAICS Code 517312.

entire year.¹³⁵ Of this number, 2,837 firms employed fewer than 250 employees.¹³⁶ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

- 35. According to Commission data as of December 2021, there were approximately 2,824 active Lower 700 MHz Band licenses.¹³⁷ The Commission's small business size standards with respect to Lower 700 MHz Band licensees involve eligibility for bidding credits and installment payments in the auction of licenses. For auctions of Lower 700 MHz Band licenses the Commission adopted criteria for three groups of small businesses. A very small business was defined as an entity that, together with its affiliates and controlling interests, has average annual gross revenues not exceeding \$15 million for the preceding three years, a small business was defined as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$40 million for the preceding three years, and an entrepreneur was defined as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$3 million for the preceding three years. ¹³⁸ In auctions for Lower 700 MHz Band licenses seventy-two winning bidders claiming a small business classification won 214 licenses, ¹⁴⁰ and three winning bidders claiming a small business classification dicenses. ¹⁴¹
- 36. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.
- 37. *Upper 700 MHz Band Licenses*. The upper 700 MHz band encompasses spectrum in the 746-806 MHz bands. Upper 700 MHz D Block licenses are nationwide licenses associated with the 758-

¹³⁵ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePrevie

¹³⁶ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹³⁷ Based on an FCC Universal Licensing System search on December 14, 2021, https://wireless2 fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = WY, WZ; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹³⁸ See 47 CFR § 27.702(a)(1)-(3).

¹³⁹ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 44: Lower 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, https://www.fcc.gov/sites/default/files/wireless/auctions/44/charts/44cls2.pdf.

¹⁴⁰ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 49: Lower 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, https://www.fcc.gov/sites/default/files/wireless/auctions/49/charts/49cls2.pdf.

¹⁴¹ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 60: Lower 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, https://www.fcc.gov/sites/default/files/wireless/auctions/60/charts/60cls2.pdf.

763 MHz and 788-793 MHz bands.¹⁴² Permissible operations in these bands include flexible fixed, mobile, and broadcast uses, including mobile and other digital new broadcast operation; fixed and mobile wireless commercial services (including FDD- and TDD-based services); as well as fixed and mobile wireless uses for private, internal radio needs, two-way interactive, cellular, and mobile television broadcasting services.¹⁴³ Wireless Telecommunications Carriers (*except* Satellite)¹⁴⁴ is the closest industry with an SBA small business size standard applicable to licenses providing services in these bands. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹⁴⁵ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹⁴⁶ Of that number, 2,837 firms employed fewer than 250 employees.¹⁴⁷ Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

- 38. According to Commission data as of December 2021, there were approximately 152 active Upper 700 MHz Band licenses. ¹⁴⁸ The Commission's small business size standards with respect to Upper 700 MHz Band licensees involve eligibility for bidding credits and installment payments in the auction of licenses. For the auction of these licenses, the Commission defined a "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years, and a "very small business" an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. ¹⁴⁹ Pursuant to these definitions, three winning bidders claiming very small business status won five of the twelve available licenses. ¹⁵⁰
- 39. *Air-Ground Radiotelephone Service*. Air-Ground Radiotelephone Service is a wireless service in which licensees are authorized to offer and provide radio telecommunications service for hire to subscribers in aircraft.¹⁵¹ A licensee may provide any type of air-ground service (i.e., voice telephony, broadband Internet, data, etc.) to aircraft of any type, and serve any or all aviation markets (commercial,

¹⁴² See 47 CFR § 27.4.

¹⁴³ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 73: 700 MHz Band, Fact Sheet, Permissible Operations, https://www.fcc.gov/auction/73/factsheet. We note that in Auction 73, Upper 700 MHz Band C and D Blocks as well as Lower 700 MHz Band A, B, and E Blocks were auctioned.

¹⁴⁴ See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

¹⁴⁵ See 13 CFR § 121.201, NAICS Code 517312.

¹⁴⁶ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

¹⁴⁷ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹⁴⁸ Based on an FCC Universal Licensing System search on December 14, 2021, https://wireless2 fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = WP, WU; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹⁴⁹ See 47 CFR § 27.502(a).

¹⁵⁰ See Auction of 700 MHz Band Licenses Closes; Winning Bidders Announced for Auction 73, Public Notice, DA-08-595, Attachment A, Report No. AUC-08-73-I (Auction 73) (March 20, 2008). The results for Upper 700 MHz Band C Block can be found on pp. 62-63.

^{151 47} CFR § 22.99.

government, and general). A licensee must provide service to aircraft and may not provide ancillary land mobile or fixed services in the 800 MHz air-ground spectrum. 152

- 40. The closest industry with an SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (*except* Satellite).¹⁵³ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹⁵⁴ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹⁵⁵ Of this number, 2,837 firms employed fewer than 250 employees.¹⁵⁶ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.
- 41. Based on Commission data as of December 2021, there were approximately four licensees with 110 active licenses in the Air-Ground Radiotelephone Service. The Commission's small business size standards with respect to Air-Ground Radiotelephone Service involve eligibility for bidding credits and installment payments in the auction of licenses. For purposes of auctions, the Commission defined "small business" as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$40 million for the preceding three years, and a "very small business" as an entity that, together with its affiliates and controlling interests, has had average annual gross revenues not exceeding \$15 million for the preceding three years. In the auction of Air-Ground Radiotelephone Service licenses in the 800 MHz band, neither of the two winning bidders claimed small business status.
- 42. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, the Commission does not collect data on the number of employees for licensees providing these services therefore, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.
- 43. 3650–3700 MHz band. Wireless broadband service licensing in the 3650-3700 MHz band provides for nationwide, non-exclusive licensing of terrestrial operations, utilizing contention-based

¹⁵² See Federal Communications Commission, Economics and Analytics, Auctions, Auction 65: 800 MHz Air-Ground Radiotelephone Service, Fact Sheet, Permissible Operations, https://www.fcc.gov/auction/65/factsheet.

¹⁵³ See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

¹⁵⁴ See 13 CFR § 121.201, NAICS Code 517312.

¹⁵⁵ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePrevie w=false.

¹⁵⁶ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹⁵⁷ Based on an FCC Universal Licensing System search on December 20, 2021, https://wireless2 fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = CG, CJ; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹⁵⁸ See 47 CFR § 22.223(b).

¹⁵⁹ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 65: 800 MHz Air-Ground Radiotelephone Service, Summary, Closing Charts, Licenses by Bidder, https://www.fcc.gov/sites/default/files/wireless/auctions/65/charts/65cls2.pdf.

technologies, in the 3650 MHz band (i.e., 3650–3700 MHz). ¹⁶⁰ Licensees are permitted to provide services on a non-common carrier and/or on a common carrier basis. ¹⁶¹ Wireless broadband services in the 3650-3700 MHz band fall in the Wireless Telecommunications Carriers (*except* Satellite). ¹⁶² industry with an SBA small business size standard that classifies a business as small if it has 1,500 or fewer employees. ¹⁶³ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. ¹⁶⁴ Of this number, 2,837 firms employed fewer than 250 employees. ¹⁶⁵ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

- 44. The Commission has not developed a small business size standard applicable to 3650–3700 MHz band licensees. Based on the licenses that have been granted, however, we estimate that the majority of licensees in this service are small Internet Access Service Providers (ISPs). As of November 2021, Commission data shows that there were 902 active licenses in the 3650–3700 MHz band. ¹⁶⁶ However, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.
- 45. *Fixed Microwave Services*. Fixed microwave services include common carrier, ¹⁶⁷ private-operational fixed, ¹⁶⁸ and broadcast auxiliary radio services. ¹⁶⁹ They also include the Upper Microwave Flexible Use Service (UMFUS), ¹⁷⁰ Millimeter Wave Service (70/80/90 GHz), ¹⁷¹ Local Multipoint Distribution Service (LMDS), ¹⁷² the Digital Electronic Message Service (DEMS), ¹⁷³ 24 GHz

¹⁶⁰ See 47 CFR §§ 90.1305, 90.1307.

¹⁶¹ See id. § 90.1309.

¹⁶² See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

¹⁶³ See 13 CFR § 121.201, NAICS Code 517312.

¹⁶⁴ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePrevie w=false

¹⁶⁵ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹⁶⁶ Based on an FCC Universal Licensing System search on November 19, 2021, https://wireless2 fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = NN; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹⁶⁷ See 47 CFR Part 101, Subparts C and I.

¹⁶⁸ See id. Subparts C and H.

¹⁶⁹ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's Rules. *See* 47 CFR Part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

¹⁷⁰ See 47 CFR Part 30.

¹⁷¹ See 47 CFR Part 101, Subpart Q.

¹⁷² See id. Subpart L.

¹⁷³ See id. Subpart G.

Service, ¹⁷⁴ Multiple Address Systems (MAS), ¹⁷⁵ and Multichannel Video Distribution and Data Service (MVDDS), ¹⁷⁶ where in some bands licensees can choose between common carrier and non-common carrier status. ¹⁷⁷ Wireless Telecommunications Carriers (*except* Satellite) ¹⁷⁸ is the closest industry with an SBA small business size standard applicable to these services. The SBA small size standard for this industry classifies a business as small if it has 1,500 or fewer employees. ¹⁷⁹ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. ¹⁸⁰ Of this number, 2,837 firms employed fewer than 250 employees. ¹⁸¹ Thus under the SBA size standard, the Commission estimates that a majority of fixed microwave service licensees can be considered small.

- 46. The Commission's small business size standards with respect to fixed microwave services involve eligibility for bidding credits and installment payments in the auction of licenses for the various frequency bands included in fixed microwave services. When bidding credits are adopted for the auction of licenses in fixed microwave services frequency bands, such credits may be available to several types of small businesses based average gross revenues (small, very small and entrepreneur) pursuant to the competitive bidding rules adopted in conjunction with the requirements for the auction and/or as identified in Part 101 of the Commission's rules for the specific fixed microwave services frequency bands. 182
- 47. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.
- 48. Broadband Radio Service and Educational Broadband Service. Broadband Radio Service systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and "wireless cable," transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the

¹⁷⁴ See id.

¹⁷⁵ See id. Subpart O.

¹⁷⁶ See id. Subpart P.

¹⁷⁷ See 47 CFR §§ 101.533, 101.1017.

¹⁷⁸ See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

¹⁷⁹ See 13 CFR § 121.201, NAICS Code 517312.

¹⁸⁰ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

¹⁸¹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹⁸² See 47 CFR §§ 101.538(a)(1)-(3), 101.1112(b)-(d), 101.1319(a)(1)-(2), and 101.1429(a)(1)-(3).

¹⁸³ The use of the term "wireless cable" does not imply that it constitutes cable television for statutory or regulatory purposes.

Instructional Television Fixed Service (ITFS)).¹⁸⁴ Wireless cable operators that use spectrum in the BRS often supplemented with leased channels from the EBS, provide a competitive alternative to wired cable and other multichannel video programming distributors. Wireless cable programming to subscribers resembles cable television, but instead of coaxial cable, wireless cable uses microwave channels.¹⁸⁵

- 49. In light of the use of wireless frequencies by BRS and EBS services, the closest industry with an SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (*except* Satellite). ¹⁸⁶ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. ¹⁸⁷ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. ¹⁸⁸ Of this number, 2,837 firms employed fewer than 250 employees. ¹⁸⁹ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.
- 50. According to Commission data as December 2021, there were approximately 5,869 active BRS and EBS licenses. ¹⁹⁰ The Commission's small business size standards with respect to BRS involves eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of BRS licenses, the Commission adopted criteria for three groups of small businesses. A very small business is an entity that, together with its affiliates and controlling interests, has average annual gross revenues exceed \$3 million and did not exceed \$15 million for the preceding three years, a small business is an entity that, together with its affiliates and controlling interests, has average gross revenues exceed \$15 million and did not exceed \$40 million for the preceding three years, and an entrepreneur is an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$3 million for the preceding three years. ¹⁹¹ Of the ten winning bidders for BRS licenses, two bidders claiming the small business status won 4 licenses, one bidder claiming the very

¹⁸⁴ See 47 CFR § 27.4; see also Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act—Competitive Bidding, Report and Order, 10 FCC Rcd 9589, 9593, para. 7 (1995).

¹⁸⁵ Generally, a wireless cable system may be described as a microwave station transmitting on a combination of BRS and EBS channels to numerous receivers with antennas, such as single-family residences, apartment complexes, hotels, educational institutions, business entities and governmental offices. The range of the transmission depends upon the transmitter power, the type of receiving antenna and the existence of a line-of-sight path between the transmitter or signal booster and the receiving antenna.

¹⁸⁶ See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

¹⁸⁷ See 13 CFR § 121.201, NAICS Code 517312.

¹⁸⁸ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

¹⁸⁹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹⁹⁰ Based on an FCC Universal Licensing System search on December 10, 2021, https://wireless2 fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =BR, ED; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹⁹¹ See 47 CFR § 27.1218(a).

small business status won three licenses and two bidders claiming entrepreneur status won six licenses.¹⁹² One of the winning bidders claiming a small business status classification in the BRS license auction has an active licenses as of December 2021.¹⁹³

51. The Commission's small business size standards for EBS define a small business as an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$55 million for the preceding five (5) years, and a very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$20 million for the preceding five (5) years. ¹⁹⁴ In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

4. Satellite Service Providers

52. Satellite Telecommunications. This industry comprises firms "primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications." Satellite telecommunications service providers include satellite and earth station operators. The SBA small business size standard for this industry classifies a business with \$35 million or less in annual receipts as small. 196 U.S. Census Bureau data for 2017 show that 275 firms in this industry operated for the entire year. 197 Of this number, 242 firms had revenue of less than \$25 million. 198 Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 71 providers that reported they were engaged in the provision of satellite telecommunications services. 199 Of these providers, the Commission estimates that

¹⁹² See Federal Communications Commission, Economics and Analytics, Auctions, Auction 86: Broadband Radio Service, Summary, Reports, All Bidders, https://www.fcc.gov/sites/default/files/wireless/auctions/86/charts/86bidder.xls.

¹⁹³ Based on an FCC Universal Licensing System search on December 10, 2021, https://wireless2 fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =BR; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹⁹⁴ See 47 CFR § 27.1219(a).

¹⁹⁵ See U.S. Census Bureau, 2017 NAICS Definition, "517410 Satellite Telecommunications," https://www.census.gov/naics/?input=517410&year=2017&details=517410.

¹⁹⁶ See 13 CFR § 121.201, NAICS Code 517410.

¹⁹⁷ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 517410, https://data.census.gov/cedsci/table?y=2017&n=517410&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

¹⁹⁸ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term ReceiptsRevenueServices.

¹⁹⁹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/publd.lic/attachments/DOC-379181A1.pdf.

approximately 48 providers have 1,500 or fewer employees.²⁰⁰ Consequently using the SBA's small business size standard, a little more than of these providers can be considered small entities.

engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation.²⁰¹ This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.²⁰² Providers of Internet services (e.g. dial-up ISPs) or voice over Internet protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry.²⁰³ The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small.²⁰⁴ U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year.²⁰⁵ Of those firms, 1,039 had revenue of less than \$25 million.²⁰⁶ Based on this data, the Commission estimates that the majority of "All Other Telecommunications" firms can be considered small.

5. Cable Service Providers

- 54. Because section 706 of the Act requires us to monitor the deployment of broadband using any technology, we anticipate that some broadband service providers may not provide telephone service. Accordingly, we describe below other types of firms that may provide broadband services, including cable companies, MDS providers, and utilities, among others.
- 55. Cable and Other Subscription Programming. The U.S. Census Bureau defines this industry as establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis.²⁰⁷ The broadcast programming is typically narrowcast in nature (e.g., limited format, such as news, sports, education, or youth-oriented). These establishments produce programming in their own facilities or acquire programming from external sources.²⁰⁸ The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.²⁰⁹ The SBA small business size standard for this industry classifies firms with annual receipts less than \$41.5 million as small.²¹⁰ Based on U.S. Census Bureau data for 2017, 378 firms

²⁰⁰ Id.

²⁰¹ See U.S. Census Bureau, 2017 NAICS Definition, "517919 All Other Telecommunications," https://www.census.gov/naics/?input=517919&year=2017&details=517919.

²⁰² Id.

²⁰³ Id.

²⁰⁴ See 13 CFR § 121.201, NAICS Code 517919.

²⁰⁵ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 517919, https://data.census.gov/cedsci/table?y=2017&n=517919&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

²⁰⁶ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term ReceiptsRevenueServices.

²⁰⁷ See U.S. Census Bureau, 2017 NAICS Definition, "515210 Cable and Other Subscription Programming," https://www.census.gov/naics/?input=515210&year=2017&details=515210.

²⁰⁸ Id

²⁰⁹ Id.

²¹⁰ See 13 CFR § 121.201, NAICS Code 515210.

operated in this industry during that year.²¹¹ Of that number, 149 firms operated with revenue of less than \$25 million a year and 44 firms operated with revenue of \$25 million or more.²¹² Based on this data, the Commission estimates that a majority of firms in this industry are small.

- 56. Cable Companies and Systems (Rate Regulation). The Commission has developed its own small business size standard for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide. Based on available data, as of December 2020, there were approximately 45,308,192 basic cable video subscribers in the top Cable MSOs in the United States. Only five cable operators serving cable video subscribers in the top Cable MSOs had more than 400,000 subscribers. Accordingly, the Commission estimates that the majority of cable operators are small.
- 57. Cable System Operators (Telecom Act Standard). The Communications Act of 1934, as amended, contains a size standard for small cable system operators, which classifies "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000," as small. As of December 2020, there were approximately 45,308,192 basic cable video subscribers in the top Cable MSOs in the United States. Accordingly, an operator serving fewer than 453,082 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate. Based on available data, all but five of the cable operators in the Top Cable MSOs have less than 453,082 subscribers and can be considered small entities under this size standard. We note however, that the Commission neither requests nor collects information on whether cable system

²¹¹ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 515210, https://data.census.gov/cedsci/table?y=2017&n=515210&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. The US Census Bureau withheld publication of the number of firms that operated for the entire year to avoid disclosing data for individual companies (see Cell Notes for this category).

²¹² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in all categories of revenue less than \$500,000 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

²¹³ 47 CFR § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 (1995).

²¹⁴ S&P Global Market Intelligence, *Top Cable MSOs 12/20Q*, https://platform.marketintelligence.spglobal.com/ (Dec. 2020).

²¹⁵ *Id*.

²¹⁶ 47 U.S.C. § 543(m)(2); see also 47 CFR § 76.901(e).

²¹⁷ S&P Global Market Intelligence, *Top Cable MSOs 12/20Q*, https://platform.marketintelligence.spglobal.com/ (Dec. 2020).

²¹⁸ 47 CFR § 76.901(e).

²¹⁹ S&P Global Market Intelligence, *Top Cable MSOs 12/20Q*, https://platform.marketintelligence.spglobal.com (Dec. 2020).

operators are affiliated with entities whose gross annual revenues exceed \$250 million.²²⁰ Therefore, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

6. All Other Telecommunications

- defines the utilities sector industry as comprised of "establishments, primarily engaged in generating, transmitting, and/or distributing electric power.²²¹ Establishments in this industry group may perform one or more of the following activities: (1) operate generation facilities that produce electric energy; (2) operate transmission systems that convey the electricity from the generation facility to the distribution system; and (3) operate distribution systems that convey electric power received from the generation facility or the transmission system to the final consumer."²²² This industry group is categorized based on fuel source and includes Hydroelectric Power Generation, Fossil Fuel Electric Power Generation, Nuclear Electric Power Generation, Solar Electric Power Generation, Wind Electric Power Generation, Geothermal Electric Power Generation, Biomass Electric Power Generation, Other Electric Power Generation, Electric Bulk Power Transmission and Control and Electric Power Distribution.²²³
- 59. The SBA has established a small business size standard for each of these groups based on the number of employees which ranges from having fewer than 250 employees to having fewer than 1,000 employees.²²⁴ U.S. Census Bureau data for 2017 indicate that for the Electric Power Generation, Transmission and Distribution industry there were 1,693 firms that operated in this industry for the entire year.²²⁵ Of this number, 1,552 firms had less than 250 employees.²²⁶ Based on this data and the associated SBA size standards, the majority of firms in this industry can be considered small entities.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

60. The Second Further Notice seeks comment on ways to effectively resolve pole replacement disputes through the establishment of standards for when and how utilities and attachers must share in the costs of a pole replacement necessitated by an attachment request. The Second Further Notice does not definitively propose any changes to the Commission's current pole attachment rules, but does request that commenters address the legal implications of any rule revisions they propose, which may include reporting, recordkeeping, and other compliance requirements. For example, the Second Further Notice seeks comment on whether the Commission has jurisdiction to require utilities to share information concerning the status of utility poles with attachers and, if so, the mechanism through which such information would be provided.

²²⁰ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(e) of the Commission's rules. *See* 47 CFR § 76.910(b).

²²¹ See U.S. Census Bureau, 2017 NAICS Definition, "Sector 22- Utilities, 2211 Electric Power Generation, Transmission and Distribution," https://www.census.gov/naics/?input=2211&year=2017&details=2211.

²²² See id.

²²³ Id.

²²⁴ See 13 CFR § 121.201, NAICS Codes 221111, 221112, 221113, 221114, 221115, 221116, 221117, 221118, 221121, 221122.

²²⁵ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 2211, https://data.census.gov/cedsci/table?y=2017&n=2211&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

²²⁶ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

61 The Second Further Notice seeks comment on what situations exist in which a pole replacement is not "necessitated solely" by a new attachment request and whether codifying a definition of this phrase would be helpful for parties seeking to comply with section 1.1408(b) of the Commission's rules. With respect to utility benefits, the Second Further Notice seeks comment on how to identify and quantify the costs associated with a pole replacement that are proportional to the direct benefit obtained by a utility from a replacement not necessitated solely by a new attachment request. The Second Further Notice also seeks comment on whether the Commission should revise its pole attachment rules to recognize that utilities directly benefit from pole replacements caused by new attachment requests and establish clear standards for when utilities should be required to pay a proportional share of pole replacement costs. Further, the Second Further Notice seeks comment on whether the Commission should adopt an express presumption that utilities directly benefit when they use pole replacements precipitated by an attachment request to upgrade or enhance their poles. The Commission then asks how costs should be allocated between utilities and attachers if such a presumption is adopted and whether the Commission should revise its cost sharing rules to require utilities to pay a portion of the costs of replacing a pole to create capacity for new attachments. The Commission also seeks comment on the scope of utility liability for pole attachment rate refunds when rates are found to be unjust and unreasonable. Should commenters provide compelling arguments, some or all of these proposals could be adopted. The guidance and clarity offered by these proposals would lessen the compliance impact on small utilities and attaching entities with regard to pole replacements and pole attachment rate refunds.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

- 62. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities. 227
- The Second Further Notice does not propose specific changes to the Commission's pole 63. attachment rules, but seeks comment on whether the Commission should revise its rules to eliminate and expedite the resolution of pole replacement disputes between utilities and attachers and provide clarity with respect to the pole attachment rate refund liability for utilities. The Commission's objective in requesting this information is to determine whether it can and should establish clear standards for when and how attachers and utilities must share the costs of a pole replacement precipitated by a new attachment request. In considering the cost allocations, the Commission seeks comment on alternatives that might help smaller utilities and attaching entities. For example, it asks that when a pole needs to be replaced both to accommodate a new attachment and to correct a preexisting violation, whether the new attacher should be responsible for the difference in cost between the taller pole needed for its attachment and what it would cost to replace the existing pole with one of the same type and size. The Second Further Notice also seeks comment on what other methods of apportioning costs are available in this situation in an attempt to properly balance this burden on different types of entities. Additionally, the Second Further Notice seeks comment on the Commission recognizing an express presumption regarding whether utilities directly benefit when they use pole replacements precipitated by an attachment request to upgrade or enhance their poles. The Commission seeks comment on cost allocation alternatives related to the presumption, were it to be adopted, that could be helpful to smaller attachers and utilities. Specifically, the Second Further Notice asks whether the new attacher should be responsible for the difference in cost between a taller pole of the same type as the existing pole and the upgraded pole, along with other typical make-ready costs of a new attachment, or if another measure is more appropriate when specific parties are involved. Notably, at the conclusion of the Second Further Notice, the Commission

²²⁷ See 5 U.S.C. § 603(c).

also asks commenters recommending certain cost allocation methodologies to address why their favored solution will expedite pole attachment approvals, benefit consumers, and otherwise be in the public interest. The Commission further seeks comment on the scope of refunds available to attachers when pole attachment rates are found to be unjust and unreasonable. Information submitted in response to these requests for comment will enable the Commission to evaluate the impact that revising its cost sharing and rate refund rules would impact smaller entities.

- F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rule
- 64. None.

STATEMENT OF CHAIRWOMAN JESSICA ROSENWORCEL

Re: Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84, Second Further Notice of Proposed Rulemaking (March 16, 2022).

There was a time, not that long ago, when you could call broadband nice-to-have, not need-to-have. Those days are over. This pandemic has made it crystal clear that we need to connect everyone, everywhere in this country—no matter who they are or where they live.

Thanks to Congress we have the largest effort ever in the United States to do just that. We are investing \$65 billion in broadband deployment, affordability, and availability through the Infrastructure Investment and Jobs Act. It's a big deal—on par with the investment made to connect the country with the interstate highway system back in 1956.

We are going to make history. But to do it, the details matter. This rulemaking is about those details, namely, the work involved in deploying fiber optic cable. It's a complicated business. Networks need to be designed. Rights of way need to be negotiated. And fiber optic cable needs to be attached to utility poles—which are often owned and controlled by the local electric company or telephone company.

Some of the companies that are in the process of building broadband to unserved and underserved areas have told us that the cost of these pole attachments can make up as much as one-third of the cost of rural deployment. That's a lot. But that figure doesn't even include the time required to negotiate and strike agreements for access to every pole.

The bottom line is that we can't afford to have access to utility poles become an impediment to broadband deployment. We are about to invest billions in high-speed infrastructure nationwide. It's essential that we have policies in place that make sure these dollars are used in a cost-effective way and that pole attachment policies facilitate, rather than impede, broadband buildout.

Congress has long recognized that fair access to utility poles is important for the construction and maintenance of communications networks. That's why Section 224 of the Communications Act provides the Federal Communications Commission with authority to oversee the rates, terms, and conditions of pole attachments. We need to use this authority to ensure that communications providers have nondiscriminatory access to this essential infrastructure—and it's especially important to do this right now as historic federal investments begin.

That's why today we seek comment on changes to our rules governing pole attachments. In particular, we ask about whether we need to provide greater clarity when a pole must be replaced before additional attachments are possible. We ask about how the cost of pole replacements should be allocated between the pole owner and the attachers, and other economic and legal issues that may arise with pole replacements. We also ask if there are other reforms we can make to speed up the process for negotiations over pole replacements and attachments, because certainty is good both for the providers seeking to build broadband networks and for the owners of utility poles.

Pole attachments and replacements don't always receive the attention they deserve. They're not the most glamorous part of broadband deployment. Soaring rhetoric about connecting all rarely features these fixtures on the ground. But they are an essential part of our effort to ensure high-speed service reaches everyone, everywhere across the country.

For their work on this rulemaking, I want to thank Pam Arluk, Adam Copeland, Liz Drogula, Trent Harkrader, Kris Monteith, Michael Nemcik, and Mike Ray of the Wireline Competition Bureau; Eugene Kiselev, Richard Kwiatkowski, Eric Ralph, and Emily Talaga of the Office of Economics and Analytics; Garnet Hanly, George Leris, and Belinda Nixon of the Wireless Telecommunications Bureau; Lisa Griffin, Rosemary McEnery, and Lisa Saks of the Enforcement Bureau; and Malena Barzilai, Rick Mallen, and Linda Oliver of the Office of General Counsel.

STATEMENT OF COMMISSIONER BRENDAN CARR

Re: Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84, Second Further Notice of Proposed Rulemaking (March 16, 2022).

One year ago this week, I gave a speech at AEI where I laid out a series of steps the Commission could take to extend U.S. leadership in 5G. I identified actions on both spectrum and infrastructure that would match the pace and cadence the agency had been moving on those fronts. One idea I offered up was for the FCC to make sure that our cost sharing rules for pole replacements aren't inhibiting Internet builds, particularly in unserved areas. After all, the more clarity we can provide with regard to pole replacements, the faster access to poles can be granted and the faster families can get connected. In that speech, I said that we could do this through a Notice of Proposed Rulemaking that would seek comment on issues raised in a July 2020 petition. So I am very pleased that we are taking precisely that action with today's vote.

Taking action now is particularly important in light of the unique opportunity we have in front of us to end the digital divide. Whether it is the \$65 billion for broadband in the bipartisan infrastructure bill or the hundreds of billions of dollars that various agencies have allocated for infrastructure projects, we have the chance to ensure that every American has a fair shot at next-gen connectivity. One way that federal and state governments alike could squander that opportunity is by allowing these dollars to get caught up in red tape and by unnecessary fees and charges. After all, if the government is just spending broadband dollars without streamlining infrastructure rules, then it's just stepping on the gas and brakes at the same time.

Specific to pole attachments, there is even more we can do to avoid that outcome. For instance, I continue to hear concerns from broadband builders about unnecessary delays and costs when they seek to attach to poles that are owned by municipal and cooperative utilities. Unlike what we are doing in today's item, there is a strong argument that Section 224 does not give us authority to address issues specific to those types of poles. Therefore, I encourage states and Congress to take a closer look at these issues—and revisit the exemption that exists in Section 224—so that we can ensure deployment is streamlined, regardless of the type of pole you are attaching to.

As part of the FCC's continuing effort to close the digital divide, we should also look at ways we can continue to streamline the rules of the road for fiber and other high-speed wired deployments. During the prior Administration, the FCC took steps to ensure that the fees charged for placing small wireless facilities in rights of way do not violate Section 253. We should begin to explore similar action for the deployment of other, wired infrastructure to ensure that the funding being made available by Congress and the FCC goes into the ground and towards connecting families.

Finally, we should make sure that all of our policies are going to encourage private sector investment in infrastructure. We must reject calls for government-subsidized overbuilding, which jeopardizes the operations of businesses that risked their own capital to serve local communities. Instead we need to direct funding to communities that have been left behind, rather than those that already benefit from high-speed Internet services today.

In closing, I would like to thank the staff of the Wireline Competition Bureau for their hard work on this item. It has my support.